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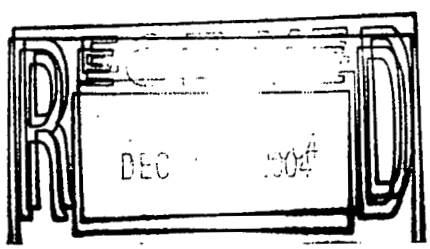
Draft Closeout Report for IHSS Group 900-11

PAC SE-1602
East Firing Range and Target Area

December 2004



1/134

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Approval received from the U. S. Environmental Protection Agency. Region VIII
( ).

Approval letter contained in the Administrative Record

December 2004

2

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

4

LIST OF APPENDICES

ENCLOSURE

Compact Disc Containing;
Standardized Real and Quality Control Accelerated Action Data

5

ACRONYMS

AAESE	Accelerated Action Ecological Screening Evaluation
AL	action level
AR	Administrative Record
ASD	Analytical Services Division
CAS	Chemical Abstract Service
BZ	Buffer Zone
BZSAP	Buffer Zone Sampling and Analysis Plan
CD	compact disc
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	contaminant of concern
CRA	Comprehensive Risk Assessment
DOE	U.S. Department of Energy
DQA	Data Quality Assessment
DQO	data quality objective
EB	equipment blank
EPA	U.S. Environmental Protection Agency
EMC	Elevated Measurement Comparison
FB	field blank
FY	Fiscal Year
HAER	Historic American Engineering Record
HPGe	high-purity germanium
HRR	Historical Release Report
IA	Industrial Area
IASAP	Industrial Area Sampling and Analysis Plan
IHSS	Individual Hazardous Substance Site
IM/IRA	Interim Measure/Interim Remedial Action
KH or K-H	Kaiser-Hill Company, L.L.C.
LCS	laboratory control sample
µg/kg	micrograms per kilogram (may be found as ug/kg)
µg/L	micrograms per liter (may be found as ug/L)
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
NA	not applicable
NFAA	No Further Accelerated Action
NLR	no longer representative
PAC	Potential Area of Concern
PARCCS	precision, accuracy, representativeness, completeness, comparability, and sensitivity
pCi/g	picocuries per gram
PCOC	potential contaminant of concern
QC	quality control
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
RIN	report identification number
RL	Reporting Limit
RNS	rinse blank
RPD	relative percent difference
SAP	Sampling and Analysis Plan
SD	standard deviation
Site	Rocky Flats Environmental Technology Site
SOR	sum of ratios

SSRS	Subsurface Soil Risk Screen
SVOC	semi-volatile organic compound
SWD	Soil Water Database
TB	trip blank
V&V	verification and validation
VOC	volatile organic compound
WRW	wildlife refuge worker

EXECUTIVE SUMMARY

This Closeout Report summarizes accelerated action activities conducted at Individual Hazardous Substance Site (IHSS) Group 900-11, Potential Area of Concern (PAC) SE-1602 the East Firing Range and Target Area which is located at the Rocky Flats Environmental Technology Site (RFETS). Sampling activities were planned and executed in accordance with the Buffer Zone (BZ) Sampling and Analysis Plan (SAP) (BZSAP), BZSAP Addendum #IA-04-11. Removal activities were planned based on the Interim Measure/Interim Remedial Action for IHSS Group 900-11 (903 Lip Area and Vicinity), the Windblown Area, and Surface Soil In Operable Unit 1 [881 Hillside]) (903 IM/IRA).

PAC SE-1602 consists of a parking area and small arms firing range in the north (referred to as the North Target Area [NTA]). Just east of the NTA is a berm that acted as the impact area for firing from west to east on the range. A bullet impact area lies to the south (referred to as the South Target Area [STA]). Between the NTA and STA were several rows of targets. Associated with the target row immediately south of the NTA is an area referred to as the trench area because bullet impacts dug six trenches after they passed through the row of targets. Activities were conducted from June 16 to December 13, 2004 and included soil characterization and the removal of contaminated soil and an asphalt parking lot. Analytical results indicate that except in the berm area all soil concentrations are less than WRW ALs. Arsenic concentrations are greater than the WRW AL in some berm areas. Results of the data quality assessment (DQA) confirmed that the data collected and used are adequate for decision making.

Removal activities were consistent with and contributed to the 903 IM/IRA overall long-term remedial action objectives (RAOs) for RFETS soil. The removal of contaminated soil and asphalt contributed to the protection of human health and the environment because potential sources of contamination were removed. These actions also minimized the need for long-term maintenance and institutional or engineering controls. Best management practices (BMPs) were used to prevent the spread of contamination during work activities.

The Subsurface Soil Risk Screen (SSRS) conducted as part of this accelerated action indicates that no further accelerated action (NFAA) is required. Groundwater will be evaluated as part of the Groundwater Interim Measure/Interim Remedial Action.

No IHSS Group-specific, near-term management techniques are required because of environmental conditions. Excavation at the site will continue to be controlled through the Site Soil Disturbance Permit process. Restricted access will minimize disturbance to newly revegetated areas. Site access and security controls and the Soil Disturbance Permit process will remain in place pending implementation of long-term controls.

The presence of residual metals in soil will be evaluated in the Accelerated Action Ecological Screening Evaluation (AAESE) and ecological risk assessment portion of the Sitewide Comprehensive Risk Assessment (CRA). The CRA is part of the Resource Conservation and Recovery Act (RCRA) Facility Investigation/Remedial Investigation and Corrective Measures Study/Feasibility Study (RI/FS) that will be conducted for the Site. The need for, and extent of, any more general or long-term stewardship activities will also be evaluated in the RI/FS and will be proposed as part of the preferred

alternative in the Proposed Plan for the Site. Institutional controls and other long-term stewardship requirements for Rocky Flats will ultimately be contained in the Corrective Action Decision/Record of Decision (CAD/ROD).

No long-term stewardship activities are recommended for IHSS Group 900-11, PAC SE-1602 beyond the generally applicable Site requirements that may be imposed on this area in the future. Institutional controls that will be used as appropriate for this area include prohibitions on construction in the BZ, restrictions on excavation or other soil disturbance, and prohibitions on groundwater pumping in the area of IHSS Group 900-11. In addition no specific engineered controls or environmental monitoring are anticipated as a result of the conditions remaining in IHSS Group 900-11.

This Closeout Report and associated documentation will be retained as part of the Rocky Flats Administrative Record (AR). The specific long-term stewardship recommendations will also be summarized in the Rocky Flats Long-Term Stewardship Strategy.

Approval of this Closeout Report constitutes regulatory agency concurrence that this IHSS Group is an NFAA Site. An NFAA decision is justified based on the following:

- No further accelerated action required based on soil characterization and confirmation data;
- No further accelerated action required based on the SSRS; and
- No further accelerated action required based on the stewardship evaluation.

This information and NFAA determination will be documented in the Fiscal Year (FY) 05 Historical Release Report (HRR).

1.0 INTRODUCTION

This Closeout Report summarizes accelerated action characterization and confirmation activities conducted at Individual Hazardous Substance Site (IHSS) Group 900-11, consisting of Potential Area of Concern (PAC) SE-1602 the East Firing Range and Target Area at the Rocky Flats Environmental Technology Site (RFETS or Site) in Golden, Colorado (Figure 1). This report does not include other IHSSs from Group 900-11 such as IHSS 112 (903 Pad), IHSS 900-140 (Hazardous Disposal Area), and 900-155 (903 Lip Area [inner and outer]) (Figure 1). Characterization activities were planned and executed in accordance with the Final Buffer Zone (BZ) Sampling and Analysis Plan (SAP) (BZSAP) (DOE 2002) and BZSAP Addendum #BZ-04-11 (DOE 2004a). The BZSAP Addendum was approved by the U. S. Environmental Protection Agency (EPA) Region VIII on January 14, 2004. The Interim Measure / Interim Remedial Action for IHSS Group 900-11 (903 Lip Area and Vicinity, the Windblown Area, and Surface Soil in Operable Unit 1 [881 Hillside]) (903 IM/IRA) (DOE 2004b) decision document is the basis for remediation and confirmation sampling at the East Firing Range. Ecological effects will be evaluated in the Accelerated Action Ecological Screening Evaluation (AAESE) and the ecological risk assessment portion of the Sitewide Comprehensive Risk Assessment (CRA).

Approval of this Closeout Report constitutes regulatory agency concurrence that PAC SE-1602 is a no further accelerated action (NFAA) site. This information and NFAA determination will be documented in the Fiscal Year (FY) 2005 (05) Historical Release Record.

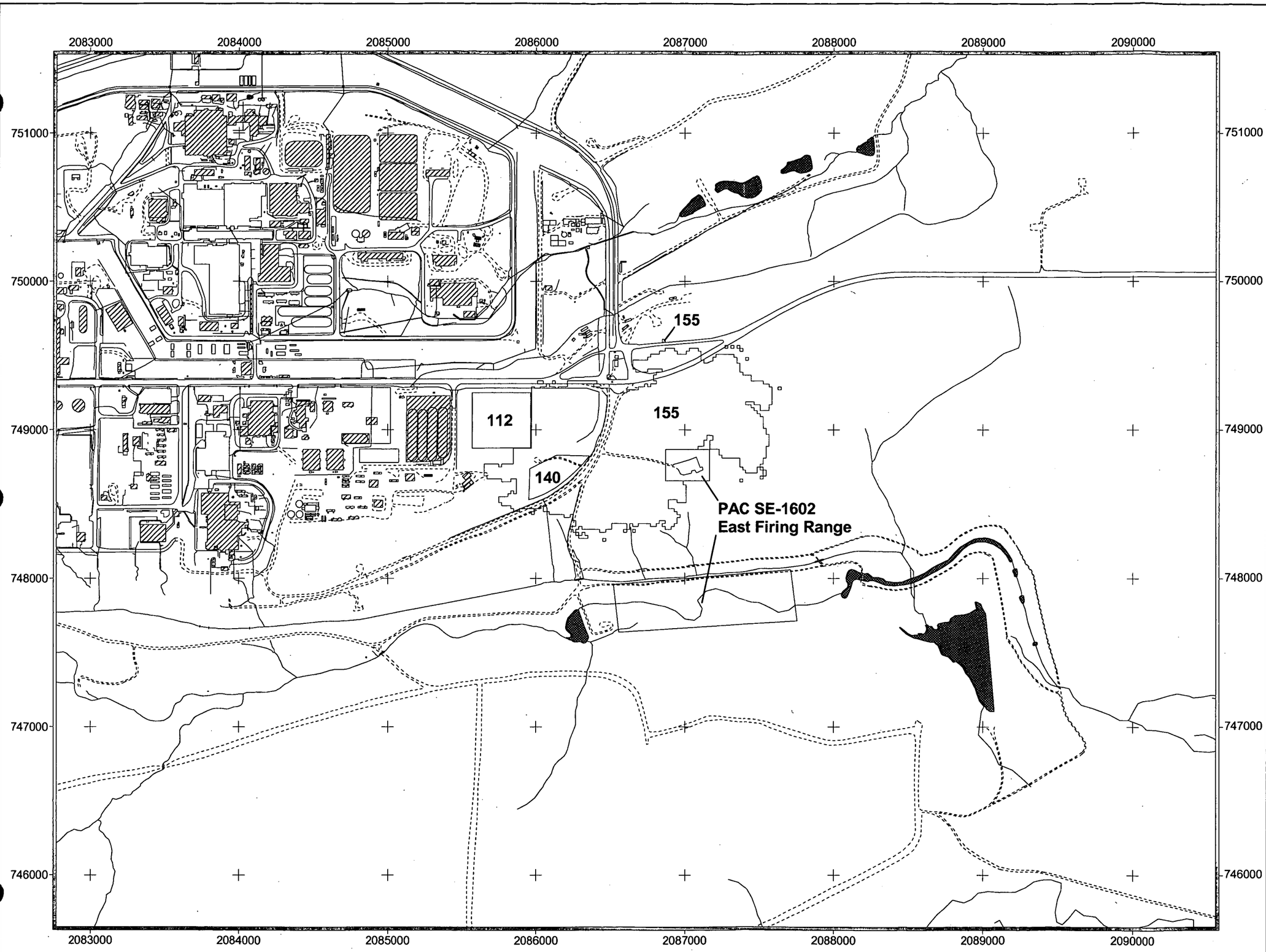
2.0 SITE CHARACTERIZATION

PAC SE-1602 is referred to as the East Firing Range. The general location of the East Firing Range is shown on Figure 1. The East Firing Range consists of two parts. The northern target area (NTA) consists of a pistol range. The southern target area (STA) is the inferred impact area. A series of targets is located between the NTA and STA. A more detailed location showing the relationships of the NTA, STA and target rows is shown on Figure 2. The pistol range in the NTA consisted of an asphalt-paved parking area, a small arms firing range with a berm, and the remnants of at least three machine-gun mounts. Small arms firing at the range was from west to east into the berm. The machine gun mounts were used to fire at targets to the south. To the south between the NTA and STA were four rows of targets (only two rows were recognized in BZSAP Addendum #BZ-04-11 [DOE2004a]).

Existing information and data for the East Firing Range and surrounding area are available in Appendix C of the BZSAP (DOE 2002) and the Historical Release Reports (HRRs) for the Rocky Flats Plant (DOE 1992-2003).

10

FIGURE 1
IHSS Group 900-11
PAC SE-1602
General Location



KEY

- PAC SE-1602 East Firing Range
- Individual Hazardous Substance Site (IHSS)
- Building demolished
- Building standing
- Pond
- Paved road
- Dirt road
- Stream

DRAFT

N
W E
S

200 0 200 400 600 800 Feet

Scale = 1:7500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

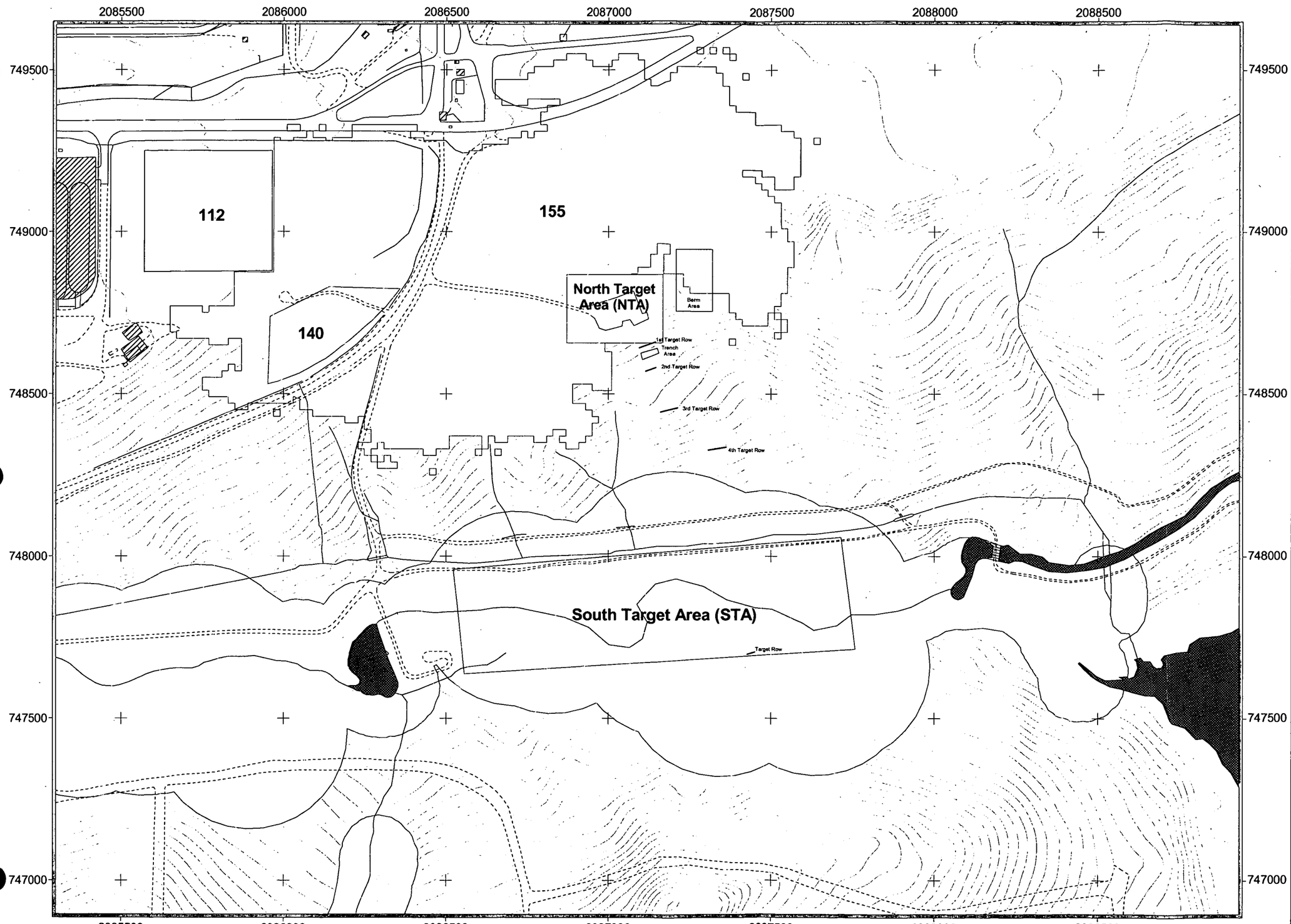
Prepared for: KAISER•HILL COMPANY

Prepared by: RADMS

File: W/Projects/Fy2005/903 Lip Area Closeout /Firing_Range/firing_range.apr

Date: 12/9/04

FIGURE 2
IHSS Group 900-11
PAC SE-1602
Detailed Location



KEY

- PAC SE-1602 East Firing Range
- Individual Hazardous Substance Site (IHSS)
- Preble's Meadow Jumping Mouse habitat
- Building demolished
- Building standing
- Pond
- Paved road
- Dirt road
- Stream
- 5-ft Topographic contour

DRAFT

N
W E
S

100 0 100 200 300 400 Feet

Scale = 1:3500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: KAISER•HILL COMPANY

Prepared for. RADMS

File: W/Projects/Fy2005/903 Lip Area Closeout /Firing_Range/firing_range.apr Date: 12/9/04

Accelerated action analytical data for the East Firing Range are summarized in Section 2.2. A compact disc (CD) is enclosed which contains the real and quality control (QC) accelerated action data for this project. The CD contains a data set in which analyte names, Chemical Abstracts Service numbers (CAS), and units are standardized, and derived analytes are provided.

2.1 Historic Information and Data

The East Firing Range was used from 1951 to 1986 for target practice and security officer qualification. Handguns and shotguns were used at the pistol range to shoot into the berm which in the HRR (DOE 1999) is cited as being approximately 200 by 300 feet (ft) but is closer to 200 by 80 ft based on the sampling locations shown here. Handguns, shotguns, machine guns (up to 0.50 caliber), and rifles were fired to the south from the southern edge of the pistol range. Armor-piercing depleted uranium bullets were used for practice on one morning (Richmond, 1999).

As shown on Figure 2, four rows of targets are located between the NTA and STA. The first target row is located about 75 feet (ft) southeast of the pistol range pad, the row is approximately 55 ft long. The second target row is located approximately 150 ft from the pistol range, the third 285 ft and the fourth 450 ft. The fourth row is approximately 60 ft long. Figure 2 also shows where a 25 ft long row of targets was located in the southern area along a small irrigation ditch.

The intensity, quantity, and accuracy of rounds expended at the first target row resulted in the excavation by bullet impact of six trenches in the soil behind the individual target frames. The trenches are approximately 8 to 10 ft long, 2 ft wide, and 1.5 ft deep. Bullet impact excavations are not visible in association with the other target rows.

The target rows represent the current locations of the majority of both fixed and movable metal targets and metal target frames at the East Firing Range. The movable targets and frames may have had other positions over the history of the range. Other targets, such as bowling pins, were also used at various locations on the East Firing Range.

2.2 Accelerated Action Characterization Data

Potential contaminants of concern (PCOCs) for the East Firing Range as specified in BZSAP Addendum #BZ-04-11 (DOE 2004) were metals. Based on bullet composition the principle PCOCs were lead, arsenic, and antimony. Brass (copper and zinc) cartridge casings were routinely collected for recycling so few are present in soil adjacent to the East Firing Range. Weapons were not routinely cleaned at the East Firing Range so solvent contamination was not considered as a PCOC. Finally, some clay pigeon fragments are present just south of the NTA. Release of polycyclic aromatic hydrocarbons (PAHs) from the clay pigeon debris was not considered a problem because the PAHs are bound to the limestone matrix and not bio-available (ITRC, 2003).

Accelerated action analytical data for characterization of the East Firing Range were collected in accordance with BZSAP Addendum #BZ-04-11 (DOE 2004a). Table 1 presents a summary of characterization accelerated action sampling and analyses. Sampling specifications, including PCOCs, are presented in Table 2 for both characterization and confirmation sampling locations. Deviations from the BZSAP

13

Addendum are also presented and explained in Table 2. The locations of characterization samples and analytical results greater than background means plus two standard deviations, including WRW AL exceedances, are shown on Figures 3, 4, 5, and 6, and listed in Table 3. Figures 3, 4, 5, and 6 present the analytical data from both surface and subsurface soil. WRW AL exceedances are show as in bold in Table 3 and red on figures 3 through 6

Table 1
IHSS Group 900-11, PAC SE-1602 East Firing Range
Accelerated Action Characterization Sampling and Analysis Summary

Criteria	Proposed Soil Analyses	Actual Soil Analyses
Number of Sampling Locations	74	110
Number of Samples	164	168
Number of Radionuclide Analyses	0	1
Number of Metal Analyses	164	168

14

Table 2
IHSS Group 900-11, PAC SE-1602 East Firing Range Accelerated Action Characterization and Confirmation Specifications and Sampling Deviations

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CP29-000	2085854.623	747300.815	2085854.676	747300.818	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for background characterization; no change in location or interval
CQ29-000	2086032.575	747318.176	2086032.625	747318.198	Surface Subsurface Soil	0.0-0.5 0.5-1.2	Metals	Biased for background characterization; no change in location or interval
CV31-002	2087029.440	747702.272	2087029.388	747702.163	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for STA characterization; no change in location or interval
CV31-003	2087114.943	747711.821	2087114.995	747711.821	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CV32-002	2087032.478	747849.407	2087032.493	747849.423	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CV32-003	2087031.176	747779.529	2087031.274	747779.593	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CV32-004	2087107.131	747848.539	2087107.110	747848.540	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CV32-005	2087111.905	747764.772	2087111.854	747764.807	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CV35-000	2087111.937	748560.260	2087111.930	748560.319	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV35-001	2087113.890	748555.247	2087113.824	748555.287	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CV35-002	2087116.039	748550.495	2087115.956	748550.514	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV35-003	2087120.661	748558.307	2087120.695	748558.346	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV35-004	2087122.810	748553.164	2087122.853	748553.158	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV35-005	2087126.911	748560.976	2087126.931	748560.985	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV35-006	2087128.995	748555.898	2087128.953	748555.891	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Biased for NTA characterization; no change in location, interval shorted due to refusal at 2.0 ft
CV36-007	2087107.445	748570.416	2087107.372	748570.412	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-008	2087109.594	748565.664	2087109.539	748565.642	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-009	2087114.086	748573.151	2087114.130	748573.101	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-010	2087116.234	748568.463	2087116.240	748568.432	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-011	2087118.513	748563.125	2087118.435	748563.168	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-012	2087120.401	748575.885	2087120.353	748575.941	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-013	2087122.354	748571.328	2087122.308	748571.338	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CV36-014	2087124.763	748565.859	2087124.715	748565.838	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for NTA characterization; no change in location or interval
CV36-020	NA	NA	2087118.450	748612.013	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for trench characterization
CV36-021	NA	NA	2087138.181	748620.555	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for trench characterization
CV36-022	NA	NA	2087248.953	748969.092	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for trench characterization, refusal at 2 ft
CV36-025	NA	NA	2087112.307	748626.837	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation; sample of excavation wall
CV36-026	NA	NA	2087118.597	748610.775	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation became in-process; sample of excavation wall, see confirmation CV36-030
CV36-027	NA	NA	2087102.149	748615.960	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation; sample of excavation wall
CV36-028	NA	NA	2087140.743	748629.847	Surface soil	3.0-3.5	Metals	Added, biased for trench confirmation; sample of excavation floor
CV36-029	NA	NA	2087114.798	748620.226	Surface soil	3.0-3.5	Metals	Added, biased for trench confirmation; sample of excavation floor
CV36-030	NA	NA	2087120.118	748602.691	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation; see in-process CV36-026
CV36-031	NA	NA	2087120.016	748602.617	Surface soil	0.0-3.0	Metals	Added, co-located with CV36-030 to collect onsite metals
CV37-009	NA	NA	2087295.330	748800.740	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, see confirmation location CW37-026, refusal at 2.0 ft
CV37-010	NA	NA	2087304.470	748822.908	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CV37-011	NA	NA	2087295.349	748843.770	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-012	NA	NA	2087301.795	748872.130	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-013	NA	NA	2087286.286	748890.202	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-014	NA	NA	2087289.646	748914.613	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization
CV37-015	NA	NA	2087271.877	748930.651	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-016	NA	NA	2087271.886	748947.018	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-017	NA	NA	2087254.913	748950.240	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-018	NA	NA	2087281.782	748797.604	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-027
CV37-019	NA	NA	2087283.705	748808.676	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-025
CV37-020	NA	NA	2087274.829	748826.802	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-024
CV37-021	NA	NA	2087278.828	748852.710	Surface Subsurface Soil	0.0-0.5 0.5-1.5	Metals	Added, biased for berm characterization, see confirmation location CW37-022, refusal at 1.5 ft
CV37-022	NA	NA	2087262.885	748876.130	Surface Subsurface Soil	0.0-0.5 0.5-1.5	Metals	Added, biased for berm characterization, see confirmation locations CW37-020 and CW37-028, refusal at 1.5 ft

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CV37-023	NA	NA	2087260.610	748901.122	Surface Subsurface Soil	0.0-0.5 0.5-1.5	Metals	Added, biased for berm characterization, see confirmation location CW37-016, refusal at 1.5 ft
CV37-024	NA	NA	2087248.645	748919.526	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-025	NA	NA	2087249.113	748941.022	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization
CV37-026	NA	NA	2087238.020	748951.418	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-027	NA	NA	2087232.034	748969.012	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-028	NA	NA	2087225.741	748956.831	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-029	NA	NA	2087221.315	748945.713	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-030	NA	NA	2087219.218	748928.525	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CV37-031	NA	NA	2087232.295	748927.743	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CW31-007	2087200.013	747720.935	2087200.012	747720.939	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CW31-008	2087292.027	747712.689	2087292.040	747712.694	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CW32-000	2087191.359	747783.408	2087345.815	747769.507	Surface soil	0.0-0.5	Metals	Collected as CW32-000, was supposed to be CX32-000, biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CW32-002							Metals	See CX31-002
CW32-003							Metals	See CX31-003
CW32-004	2087266.419	747821.630	2087266.449	747821.633	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CW32-005	2087280.308	747763.036	2087280.308	747763.053	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CW36-000	NA	NA	2087138.087	748637.769	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation; sample of excavation wall
CW36-001	NA	NA	2087154.143	748634.674	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation; sample of excavation wall
CW36-002	NA	NA	2087144.500	748620.174	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation became in-process; sample of excavation wall, see confirmation CW36-003
CW36-003	NA	NA	2087144.657	748613.376	Surface soil	0.0-3.0	Metals	Added, biased for trench confirmation, south wall of excavation, see in-process CW36-002
CW36-004	NA	NA	2087144.654	748613.382	Surface soil	0.0-3.0	Metals	Added, co-located with CW36-003 to collect onsite metals
CW37-010	NA	NA	2087233.836	748916.271	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization
CW37-011	NA	NA	2087243.335	748901.887	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Added, biased for berm characterization, refusal at 2.0 ft
CW37-012	NA	NA	2087231.763	748887.888	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-017
CW37-013	NA	NA	2087246.759	748878.720	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-018

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CW37-014	NA	NA	2087245.962	748865.692	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-021
CW37-015	NA	NA	2087261.968	748843.817	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Added, biased for berm characterization, see confirmation location CW37-023
CW37-016	NA	NA	2087260.641	748901.093	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CV37-023
CW37-017	NA	NA	2087231.722	748887.896	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CW37-012
CW37-018	NA	NA	2087246.797	748878.777	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CW37-013
CW37-019	NA	NA	2087286.322	748890.231	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CV37-013
CW37-020	NA	NA	2087263.006	748876.129	Subsurface soil	2.0-2.5	Metals	Added, biased for berm confirmation became in-process, see characterization location CV37-022 and confirmation CW37-028
CW37-021	NA	NA	2087245.889	748865.686	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CW37-014
CW37-022	NA	NA	2087278.881	748852.637	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CV37-021
CW37-023	NA	NA	2087262.052	748843.848	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CW37-015
CW37-024	NA	NA	2087274.811	748826.713	Subsurface soil	2.5-3.0	Metals	Added, biased for berm confirmation, see characterization location CV37-020
CW37-025	NA	NA	2087283.723	748808.789	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CV37-019
CW37-026	NA	NA	2087295.241	748800.681	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CV37-009
CW37-027	NA	NA	2087281.781	748797.655	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see characterization location CV37-018
CW37-028	NA	NA	2087262.961	748876.119	Surface soil	0.0-0.5	Metals	Added, biased for berm confirmation, see in-process CW37-020 and characterization CV37-022

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CX31-002	2087360.494	747637.041	2087182.162	747849.519	Surface soil	0.0-0.5	Metals	Collected as CX31-002, was supposed to be CW32-002, biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-003	2087354.350	747741.486	2087191.300	747783.051	Surface soil	0.0-0.5	Metals	Collected as CX31-003 was supposed to be CW32-003, biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-031	2087354.527	747741.334	2087354.533	747741.347	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-032	2087363.207	747712.689	2087363.282	747712.674	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-033	2087373.624	747676.230	2087373.646	747676.243	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-035	2087385.343	747638.036	2087385.384	747638.042	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-036	2087371.454	747761.300	2087371.453	747761.337	Surface Subsurface Soil	0.0-0.5 0.5-2.0	Metals	Biased for STA characterization; no change in location, refusal at 2.0 ft
CX31-037	2087379.700	747736.994	2087379.683	747736.947	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-038	2087387.947	747710.518	2087387.942	747710.469	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-039	2087398.797	747676.230	2087398.854	747676.132	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for STA characterization; no change in location or interval
CX31-040	2087411.384	747639.772	2087411.380	747639.732	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CX31-041	2087396.193	747756.525	2087396.352	747756.677	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-042	2087403.138	747734.824	2087403.205	747734.856	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-043	2087412.252	747710.953	2087412.286	747710.886	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-044	2087422.669	747678.400	2087422.640	747678.385	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-045	2087435.690	747641.508	2087435.671	747641.526	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-046	2087419.197	747754.789	2087419.210	747754.825	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-047	2087427.009	747733.956	2087427.007	747734.031	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-048	2087434.822	747711.821	2087434.846	747711.782	Surface Subsurface Soil	0.0-0.5 0.5-1.5	Metals	Biased for STA characterization; no change in location, refusal at 1.5 ft
CX31-049	2087446.107	747681.439	2087446.257	747681.511	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-050	2087460.429	747642.810	2087460.441	747642.835	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for STA characterization; no change in location or interval
CX31-051	2087442.634	747752.619	2087442.699	747752.611	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for STA characterization; no change in location or interval
CX31-052	2087450.013	747733.088	2087450.044	747733.051	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CX31-053	2087459.127	747710.518	2087459.121	747710.531	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-054	2087471.280	747679.268	2087471.278	747679.243	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-055	2087486.037	747641.074	2087486.054	747641.079	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-056	2087516.853	747740.466	2087516.926	747740.450	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-057	2087530.308	747712.689	2087530.340	747712.668	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CX31-058	NA	NA	2087449.075	747704.370	Surface soil	0.0-0.5	Metals	Added, biased for target row in STA
CX31-059	NA	NA	2087426.110	747697.873	Surface soil	0.0-0.5	Metals	Added, biased for target row in STA
CX31-060	NA	NA	2087390.224	747669.689	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-061	NA	NA	2087378.371	747699.262	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-062	NA	NA	2087366.579	747729.007	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-063	NA	NA	2087354.718	747758.811	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-064	NA	NA	2087410.117	747694.568	Subsurface soil	0.75-1.0	Metals	Added, statistical for STA confirmation
CX31-065	NA	NA	2087398.278	747724.436	Subsurface soil	1.1-1.3	Metals	Added, statistical for STA confirmation
CX31-066	NA	NA	2087386.499	747754.003	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-067	NA	NA	2087441.760	747689.981	Subsurface soil	0.8-1.0	Metals	Added, statistical for STA confirmation
CX31-068	NA	NA	2087429.937	747719.776	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CX31-069	NA	NA	2087418.059	747749.482	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-070	NA	NA	2087473.414	747685.365	Subsurface soil	0.75-1.0	Metals	Added, statistical for STA confirmation
CX31-071	NA	NA	2087461.569	747715.067	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-072	NA	NA	2087449.731	747744.850	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-073	NA	NA	2087524.944	747705.803	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CX31-074	NA	NA	2087493.116	747710.065	Surface soil	0.0-0.5	Metals	Added, biased for STA characterization, see confirmation CX31-077
CX31-075	NA	NA	2087505.102	747680.782	Surface soil	0.0-0.5	Metals	Added, biased for STA characterization, see in-process CX31-078 and confirmation CX31-083
CX31-076	NA	NA	2087530.962	747730.017	Surface soil	0.0-0.5	Metals	Added, biased for STA characterization, see confirmation CX31-079
CX31-077	NA	NA	2087493.139	747709.944	Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation, see characterization CX31-074
CX31-078	NA	NA	2087505.043	747680.799	Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation became in-process, see characterization CX31-075 and confirmation CX31-083
CX31-079	NA	NA	2087530.958	747729.973	Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation, see characterization CX31-076
CX31-080	NA	NA			Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation
CX31-081	NA	NA			Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation
CX31-082	NA	NA			Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation
CX31-083	NA	NA	2087505.109	747680.811	Subsurface soil	2.0-2.5	Metal	Added, biased for STA confirmation, see in-process CX31-075 and confirmation CX31-078
CX31-084	NA	NA	2087490.836	747725.063	Surface soil	0.0-0.5	Metal	Added, co-located with CX31-080 to collect onsite metals
CX31-085	NA	NA	2087528.841	747738.568	Surface soil	0.0-0.5	Metal	Added, co-located with CX31-081 to collect onsite metals

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CX31-086	NA	NA	2087505.267	747671.366	Surface soil	0.0-0.5	Metal	Added, co-located with CX31-082 to collect onsite metals
CX32-000	NA	NA					Metals	See CW32-000
CX32-001	NA	NA	2087356.851	747868.649	Sediment	0.0-0.5	Metals	Added, biased for STA characterization, on Woman Creek, sediment location
CX32-002	NA	NA	2087346.724	747868.719	Sediment	0.0-0.5	Metals, Alpha Spectrometry	Added, biased for STA characterization, on Woman Creek, sediment location
CX32-003	NA	NA	2087373.199	747774.677	Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation
CX32-004	NA	NA	2087405.028	747769.831	Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation
CX32-005	NA	NA	2087436.982	747764.884	Surface soil	0.0-0.5	Metals	Added, biased for STA characterization, see in-process CX32-006 and confirmation CX32-008
CX32-006	NA	NA	2087436.888	747764.829	Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation became in-process, see characterization CX32-005 and confirmation CX32-008
CX32-007	NA	NA			Surface soil	0.0-0.5	Metals	Added, biased for STA confirmation
CX32-008	NA	NA	2087436.711	747764.930	Subsurface soil	2.0-2.5	Metals	Added, biased for STA confirmation, see characterization CX32-005 and confirmation CX32-006
CX32-009	NA	NA	2087435.910	747775.486	Surface soil	0.0-0.5	Metals	Added, co-located with CX32-007 to collect onsite metals
CY28-000	2087690.561	747010.017	2087690.545	747009.922	Surface Subsurface Soil	0.0-0.5 0.5-2.3	Metals	Biased for background characterization; no change in location, refusal at 2.3 ft
CY31-008	2087542.461	747685.779	2087542.459	747685.862	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CY31-009	2087592.374	747726.578	2087592.341	747726.509	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CY31-010	2087607.565	747699.234	2087607.546	747699.324	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CY31-011	2087625.360	747665.814	2087625.314	747665.914	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CY31-012	2087678.311	747699.668	2087678.272	747699.656	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CY31-013	2087690.464	747679.268	2087690.393	747679.333	Surface Subsurface Soil	0.0-0.5 0.5-2.3	Metals	Biased for STA characterization; no change in location, refusal at 2.3 ft
CY31-014	2087701.749	747660.171	2087701.758	747660.270	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CY31-015	NA	NA	2087536.716	747676.110	Subsurface soil	1.0-1.2	Metals	Added, statistical for STA confirmation
CY32-000	NA	NA	2087695.219	747785.121	Sediment	0.0-0.5	Metals	Added, biased for STA characterization, on Woman Creek, sediment location
CZ28-000	2087833.790	746962.274	2087833.788	746962.204	Surface Subsurface Soil	0.0-0.5 0.5-2.5	Metals	Biased for background characterization; no change in location or interval
CZ31-004	2087749.492	747710.518	2087749.485	747710.490	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CZ31-005	2087763.815	747689.685	2087763.843	747689.815	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CZ31-006	2087780.742	747664.512	2087780.751	747664.510	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CZ31-007	2087825.881	747720.935	2087825.911	747720.901	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
CZ31-008	2087843.676	747696.630	2087843.579	747696.581	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04

Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comments/Deviations
CZ31-009	2087899.232	747623.713	2087899.174	747623.528	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
DA31-002	2087947.843	747676.230	2087947.950	747676.168	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
DA31-003	2087991.679	747622.845	2087991.721	747622.849	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04
DA31-004	2088026.836	747581.612	2088026.817	747581.586	Surface soil	0.0-0.5	Metals	Biased for STA characterization; no change in location, 0.5-2.5 interval not collected see RCR 7/13/04

ft = foot
NTA = North Target Area
STA = South Target Area

Table 3
IHSS Group 900-11, PAC SE-1602, East Firing Range Accelerated Action Characterization Data Greater Than Background Means Plus Two Standard Deviations or Reporting Limits

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CP29-000	2085854.676	747300.818	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CP29-000	2085854.676	747300.818	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CP29-000	2085854.676	747300.818	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CP29-000	2085854.676	747300.818	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CP29-000	2085854.676	747300.818	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CP29-000	2085854.676	747300.818	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Antimony	0.520	NA	409.000	0.470	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Beryllium	0.980	NA	921.000	0.966	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Manganese	460.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CQ29-000	2086032.625	747318.198	Vanadium	49.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV31-002	2087029.388	747702.163	Barium	240.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV31-002	2087029.388	747702.163	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV31-002	2087029.388	747702.163	Cobalt	14.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV31-002	2087029.388	747702.163	Manganese	890.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV31-002	2087029.388	747702.163	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV31-002	2087029.388	747702.163	Vanadium	52.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV31-003	2087114.995	747711.821	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV31-003	2087114.995	747711.821	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV31-003	2087114.995	747711.821	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV31-003	2087114.995	747711.821	Manganese	400.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV31-003	2087114.995	747711.821	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV32-004	2087107.110	747848.540	Barium	190.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV32-004	2087107.110	747848.540	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV32-004	2087107.110	747848.540	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV32-004	2087107.110	747848.540	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV32-004	2087107.110	747848.540	Manganese	1100.000	NA	3480.000	365.080	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV32-004	2087107.110	747848.540	Nickel	17.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV32-004	2087107.110	747848.540	Strontium	54.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Copper	25.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Manganese	1200.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Selenium	2.000	NA	5110.000	1.224	mg/kg	0.0	0.5
CV32-005	2087111.854	747764.807	Strontium	55.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Aluminum	27000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Chromium	27.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Cobalt	12.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Iron	24000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Lithium	19.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Manganese	660.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Nickel	20.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-000	2087111.930	748560.319	Vanadium	55.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Aluminum	27000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Antimony	0.560	NA	409.000	0.470	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Chromium	27.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Copper	21.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Iron	24000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Lithium	21.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Manganese	490.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Vanadium	54.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-001	2087113.824	748555.287	Zinc	74.000	NA	307000.000	73.760	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV35-001	2087113.824	748555.287	Barium	410.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV35-001	2087113.824	748555.287	Manganese	1300.000	NA	3480.000	901.620	mg/kg	0.5	2.5
CV35-002	2087115.956	748550.514	Aluminum	33000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Barium	240.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Beryllium	1.300	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Chromium	32.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Copper	21.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Iron	26000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Lithium	25.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Manganese	430.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Nickel	23.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Vanadium	64.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-002	2087115.956	748550.514	Barium	390.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV35-003	2087120.695	748558.346	Aluminum	30000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Chromium	32.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Copper	21.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Lithium	22.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Manganese	450.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Vanadium	63.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-003	2087120.695	748558.346	Barium	310.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV35-004	2087122.853	748553.158	Aluminum	30000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Barium	240.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Chromium	30.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Copper	21.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Lithium	23.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Manganese	600.000	NA	3480.000	365.080	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV35-004	2087122.853	748553.158	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Vanadium	61.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-004	2087122.853	748553.158	Barium	290.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV35-005	2087126.931	748560.985	Aluminum	32000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Barium	240.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Beryllium	1.300	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Chromium	33.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Iron	27000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Lead	58.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Lithium	23.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Manganese	490.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Vanadium	62.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-005	2087126.931	748560.985	Aluminum	36000.000	NA	228000.000	35373.170	mg/kg	0.5	2.5
CV35-005	2087126.931	748560.985	Barium	290.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV35-005	2087126.931	748560.985	Lead	30.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV35-006	2087128.953	748555.891	Aluminum	24000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Chromium	26.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Copper	26.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Lead	95.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Manganese	680.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Vanadium	51.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV35-006	2087128.953	748555.891	Barium	310.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV35-006	2087128.953	748555.891	Lead	31.000	NA	1000.000	24.970	mg/kg	0.5	2.0
CV36-007	2087107.372	748570.412	Antimony	0.650	NA	409.000	0.470	mg/kg	0.0	0.5
CV36-007	2087107.372	748570.412	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV36-007	2087107.372	748570.412	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-007	2087107.372	748570.412	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-007	2087107.372	748570.412	Lead	93.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV36-007	2087107.372	748570.412	Lithium	12.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-007	2087107.372	748570.412	Manganese	420.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-007	2087107.372	748570.412	Barium	310.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV36-008	2087109.539	748565.642	Aluminum	23000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Barium	280.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Manganese	1200.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Vanadium	48.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-008	2087109.539	748565.642	Barium	300.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV36-009	2087114.130	748573.101	Aluminum	29000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Antimony	0.500	NA	409.000	0.470	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Chromium	31.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Copper	21.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Lead	55.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Lithium	20.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Manganese	520.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Vanadium	59.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-009	2087114.130	748573.101	Aluminum	37000.000	NA	228000.000	35373.170	mg/kg	0.5	2.5
CV36-009	2087114.130	748573.101	Lead	27.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV36-010	2087116.240	748568.432	Aluminum	31000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Antimony	0.670	NA	409.000	0.470	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV36-010	2087116.240	748568.432	Beryllium	1.300	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Chromium	49.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Iron	27000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Lithium	22.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Manganese	560.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Nickel	30.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Vanadium	62.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-010	2087116.240	748568.432	Lead	26.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV36-011	2087118.435	748563.168	Aluminum	32000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Beryllium	1.300	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Chromium	32.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Copper	23.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Iron	26000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Lithium	24.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Manganese	430.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Vanadium	61.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Zinc	75.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV36-011	2087118.435	748563.168	Aluminum	36000.000	NA	228000.000	35373.170	mg/kg	0.5	2.5
CV36-011	2087118.435	748563.168	Barium	380.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV36-011	2087118.435	748563.168	Manganese	920.000	NA	3480.000	901.620	mg/kg	0.5	2.5
CV36-012	2087120.353	748575.941	Aluminum	26000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Barium	260.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Chromium	39.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Cobalt	12.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Copper	23.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Lead	120.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Lithium	18.000	NA	20400.000	11.550	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV36-012	2087120.353	748575.941	Manganese	780.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Nickel	25.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Vanadium	56.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-012	2087120.353	748575.941	Lead	40.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV36-013	2087122.308	748571.338	Aluminum	28000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Antimony	0.570	NA	409.000	0.470	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Chromium	32.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Copper	24.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Iron	24000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Lead	110.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Lithium	19.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Manganese	550.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Vanadium	57.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Zinc	74.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV36-013	2087122.308	748571.338	Barium	290.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV36-013	2087122.308	748571.338	Lead	37.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV36-014	2087124.715	748565.838	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Lead	65.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Manganese	480.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Nickel	17.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-014	2087124.715	748565.838	Aluminum	36000.000	NA	228000.000	35373.170	mg/kg	0.5	2.5
CV36-014	2087124.715	748565.838	Lead	26.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV36-020	2087118.450	748612.013	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Antimony	23.000	NA	409.000	0.470	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Barium	250.000	NA	26400.000	141.260	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV36-020	2087118.450	748612.013	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Copper	470.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-020	**2087118.450**	**748612.013**	**Lead**	**4500.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CV36-020	2087118.450	748612.013	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Manganese	920.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Vanadium	47.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Zinc	130.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV36-020	2087118.450	748612.013	Copper	120.000	NA	40900.000	38.210	mg/kg	0.5	2.5
CV36-020	**2087118.450**	**748612.013**	**Lead**	**2100.000**	**NA**	**1000.000**	**24.970**	**mg/kg**	**0.5**	**2.5**
CV36-021	2087138.181	748620.555	Aluminum	24000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Antimony	18.000	NA	409.000	0.470	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Copper	190.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-021	**2087138.181**	**748620.555**	**Lead**	**3800.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CV36-021	2087138.181	748620.555	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Manganese	460.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Vanadium	49.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Zinc	89.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV36-021	2087138.181	748620.555	Antimony	82.000	NA	409.000	16.970	mg/kg	0.5	2.5
CV36-021	**2087138.181**	**748620.555**	**Copper**	**130000.000**	**NA**	**40900.000**	**38.210**	**mg/kg**	**0.5**	**2.5**
CV36-021	**2087138.181**	**748620.555**	**Lead**	**10000.000**	**NA**	**1000.000**	**24.970**	**mg/kg**	**0.5**	**2.5**
CV36-021	2087138.181	748620.555	Zinc	6600.000	NA	307000.000	139.100	mg/kg	0.5	2.5
CV36-022	**2087248.953**	**748969.092**	**Arsenic**	**25.400**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV36-022	2087248.953	748969.092	Barium	683.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV36-022	2087248.953	748969.092	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Chromium	17.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Chromium	59.200	NA	268.000	16.990	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Copper	20.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Iron	26800.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Lead	56.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Lithium	12.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Nickel	38.400	NA	20400.000	14.910	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Strontium	175.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Strontium	74.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Vanadium	115.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Zinc	81.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Zinc	107.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV36-022	2087248.953	748969.092	Arsenic	21.000	NA	22.200	13.140	mg/kg	0.5	2.0
CV36-022	2087248.953	748969.092	Barium	706.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV36-022	2087248.953	748969.092	Barium	330.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV36-022	2087248.953	748969.092	Lead	28.000	NA	1000.000	24.970	mg/kg	0.5	2.0
CV36-022	2087248.953	748969.092	Vanadium	141.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-009	**2087295.330**	**748800.740**	**Arsenic**	**45.600**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-009	2087295.330	748800.740	Barium	741.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Chromium	38.400	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Iron	29600.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Lead	269.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Nickel	38.900	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Strontium	186.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Vanadium	104.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-009	2087295.330	748800.740	Zinc	86.900	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-009	**2087295.330**	**748800.740**	**Arsenic**	**27.300**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CV37-009	2087295.330	748800.740	Barium	697.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-009	2087295.330	748800.740	Lead	78.000	NA	1000.000	24.970	mg/kg	0.5	2.0
CV37-009	2087295.330	748800.740	Vanadium	114.000	NA	7150.000	88.490	mg/kg	0.5	2.0

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-010	**2087304.470**	**748822.908**	**Arsenic**	**28.700**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-010	2087304.470	748822.908	Barium	740.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Chromium	45.700	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Iron	26400.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Nickel	34.500	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Strontium	160.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Vanadium	90.500	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Zinc	79.300	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-010	2087304.470	748822.908	Barium	759.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-011	2087295.349	748843.770	Barium	774.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Chromium	46.200	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Iron	29100.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Nickel	39.600	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Strontium	214.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Vanadium	113.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Zinc	91.400	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-011	2087295.349	748843.770	Barium	926.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-011	2087295.349	748843.770	Vanadium	127.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-012	**2087301.795**	**748872.130**	**Arsenic**	**29.200**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-012	2087301.795	748872.130	Barium	698.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Chromium	54.500	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Iron	30500.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Lead	95.700	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Nickel	40.700	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Strontium	216.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Vanadium	99.100	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Zinc	92.900	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-012	2087301.795	748872.130	Barium	739.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-012	2087301.795	748872.130	Vanadium	107.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-013	**2087286.286**	**748890.202**	**Arsenic**	**63.500**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-013	2087286.286	748890.202	Barium	746.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Chromium	47.200	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Iron	27500.000	NA	307000.000	18037.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-013	2087286.286	748890.202	Lead	529.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Nickel	38.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Selenium	1.990	NA	5110.000	1.224	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Strontium	186.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Vanadium	128.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-013	2087286.286	748890.202	Zinc	102.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-013	**2087286.286**	**748890.202**	**Arsenic**	**34.200**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CV37-013	2087286.286	748890.202	Barium	807.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-013	2087286.286	748890.202	Vanadium	115.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-014	2087289.646	748914.613	Aluminum	18000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Arsenic	15.700	NA	22.200	10.090	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Barium	654.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Barium	190.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Chromium	50.200	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Iron	27900.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Nickel	37.500	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Strontium	67.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Strontium	174.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Vanadium	130.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Vanadium	47.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Zinc	106.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-014	2087289.646	748914.613	Arsenic	16.000	NA	22.200	13.140	mg/kg	0.5	2.5
CV37-014	2087289.646	748914.613	Barium	661.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV37-014	2087289.646	748914.613	Lead	26.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV37-014	2087289.646	748914.613	Vanadium	109.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CV37-015	2087271.877	748930.651	Barium	779.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-015	2087271.877	748930.651	Chromium	52.900	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-015	2087271.877	748930.651	Iron	27100.000	NA	307000.000	18037.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-015	2087271.877	748930.651	Nickel	38.900	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-015	2087271.877	748930.651	Strontium	199.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-015	2087271.877	748930.651	Vanadium	134.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-015	2087271.877	748930.651	Zinc	106.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-015	2087271.877	748930.651	Barium	889.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-015	2087271.877	748930.651	Strontium	223.000	NA	613000.000	211.380	mg/kg	0.5	2.0
CV37-015	2087271.877	748930.651	Vanadium	107.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-016	2087271.886	748947.018	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Antimony	0.670	NA	409.000	0.470	mg/kg	0.0	0.5
CV37-016	**2087271.886**	**748947.018**	**Arsenic**	**27.800**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-016	2087271.886	748947.018	Barium	677.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Chromium	54.400	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Chromium	20.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Iron	27500.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Lead	80.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Nickel	37.800	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Strontium	76.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Strontium	176.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Vanadium	130.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Vanadium	48.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Zinc	107.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-016	2087271.886	748947.018	Barium	695.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-016	2087271.886	748947.018	Barium	290.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-016	2087271.886	748947.018	Vanadium	107.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-017	2087254.913	748950.240	Barium	763.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-017	2087254.913	748950.240	Chromium	44.700	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-017	2087254.913	748950.240	Iron	25500.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-017	2087254.913	748950.240	Nickel	34.100	NA	20400.000	14.910	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-017	2087254.913	748950.240	Strontium	207.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-017	2087254.913	748950.240	Vanadium	97.300	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-017	2087254.913	748950.240	Zinc	82.300	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-017	2087254.913	748950.240	Barium	849.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-017	2087254.913	748950.240	Vanadium	107.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-018	**2087281.782**	**748797.604**	**Arsenic**	**41.200**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-018	2087281.782	748797.604	Barium	859.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Chromium	33.300	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Iron	26700.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Lead	549.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Nickel	35.700	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Selenium	1.920	NA	5110.000	1.224	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Strontium	180.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Vanadium	94.500	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-018	2087281.782	748797.604	Zinc	85.900	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-018	**2087281.782**	**748797.604**	**Arsenic**	**46.600**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CV37-018	2087281.782	748797.604	Barium	802.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV37-018	2087281.782	748797.604	Lead	419.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV37-018	2087281.782	748797.604	Vanadium	114.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CV37-019	**2087283.705**	**748808.676**	**Arsenic**	**52.400**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-019	2087283.705	748808.676	Barium	767.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Chromium	48.400	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Iron	30500.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Lead	294.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Nickel	42.600	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Strontium	187.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Vanadium	104.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-019	2087283.705	748808.676	Zinc	83.700	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-019	**2087283.705**	**748808.676**	**Arsenic**	**51.100**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CV37-019	2087283.705	748808.676	Barium	743.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV37-019	2087283.705	748808.676	Lead	335.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CV37-019	2087283.705	748808.676	Vanadium	97.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CV37-020	2087274.829	748826.802	Arsenic	21.800	NA	22.200	10.090	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-020	2087274.829	748826.802	Barium	693.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Chromium	49.900	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Cobalt	11.100	NA	1550.000	10.910	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Iron	41600.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Nickel	60.700	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Strontium	159.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Vanadium	104.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-020	2087274.829	748826.802	Arsenic	19.800	NA	22.200	13.140	mg/kg	0.5	2.5
CV37-020	2087274.829	748826.802	Barium	610.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV37-020	2087274.829	748826.802	Iron	41200.000	NA	307000.000	41046.520	mg/kg	0.5	2.5
CV37-020	2087274.829	748826.802	Vanadium	119.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CV37-021	**2087278.828**	**748852.710**	**Arsenic**	**51.100**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-021	2087278.828	748852.710	Barium	824.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-021	2087278.828	748852.710	Chromium	43.500	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-021	2087278.828	748852.710	Iron	38400.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-021	2087278.828	748852.710	Lead	326.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-021	2087278.828	748852.710	Nickel	52.500	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-021	2087278.828	748852.710	Strontium	172.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-021	2087278.828	748852.710	Vanadium	98.700	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-021	**2087278.828**	**748852.710**	**Arsenic**	**46.900**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**1.5**
CV37-021	2087278.828	748852.710	Barium	783.000	NA	26400.000	289.380	mg/kg	0.5	1.5
CV37-021	2087278.828	748852.710	Lead	198.000	NA	1000.000	24.970	mg/kg	0.5	1.5
CV37-021	2087278.828	748852.710	Vanadium	103.000	NA	7150.000	88.490	mg/kg	0.5	1.5
CV37-022	**2087262.885**	**748876.130**	**Arsenic**	**31.600**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-022	2087262.885	748876.130	Barium	805.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-022	2087262.885	748876.130	Chromium	67.300	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-022	2087262.885	748876.130	Iron	41300.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-022	2087262.885	748876.130	Nickel	55.800	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-022	2087262.885	748876.130	Strontium	168.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-022	2087262.885	748876.130	Vanadium	93.600	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-022	**2087262.885**	**748876.130**	**Arsenic**	**44.600**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**1.5**
CV37-022	2087262.885	748876.130	Barium	860.000	NA	26400.000	289.380	mg/kg	0.5	1.5
CV37-022	2087262.885	748876.130	Vanadium	96.000	NA	7150.000	88.490	mg/kg	0.5	1.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-023	2087260.610	748901.122	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Antimony	0.670	NA	409.000	0.470	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Antimony	13.500	NA	409.000	0.470	mg/kg	0.0	0.5
CV37-023	**2087260.610**	**748901.122**	**Arsenic**	**41.300**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-023	2087260.610	748901.122	Barium	843.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Chromium	30.700	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Iron	38100.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Lead	203.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Lead	100.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Nickel	51.400	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Strontium	164.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Vanadium	90.400	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-023	2087260.610	748901.122	Antimony	260.000	NA	409.000	16.970	mg/kg	0.5	1.5
CV37-023	**2087260.610**	**748901.122**	**Arsenic**	**32.600**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**1.5**
CV37-023	2087260.610	748901.122	Arsenic	15.000	NA	22.200	13.140	mg/kg	0.5	1.5
CV37-023	2087260.610	748901.122	Barium	879.000	NA	26400.000	289.380	mg/kg	0.5	1.5
CV37-023	**2087260.610**	**748901.122**	**Lead**	**8500.000**	**NA**	**1000.000**	**24.970**	**mg/kg**	**0.5**	**1.5**
CV37-024	**2087248.645**	**748919.526**	**Arsenic**	**33.700**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-024	2087248.645	748919.526	Barium	769.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-024	2087248.645	748919.526	Chromium	50.900	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-024	2087248.645	748919.526	Iron	41500.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-024	2087248.645	748919.526	Nickel	58.700	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-024	2087248.645	748919.526	Strontium	169.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-024	2087248.645	748919.526	Vanadium	104.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-024	**2087248.645**	**748919.526**	**Arsenic**	**26.300**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CV37-024	2087248.645	748919.526	Barium	769.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-025	**2087249.113**	**748941.022**	**Arsenic**	**28.200**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-025	2087249.113	748941.022	Barium	787.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Chromium	35.800	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Copper	49.700	NA	40900.000	18.060	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Iron	39300.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Manganese	386.000	NA	3480.000	365.080	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-025	2087249.113	748941.022	Nickel	53.800	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Strontium	174.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Vanadium	123.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-025	2087249.113	748941.022	Zinc	75.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-025	**2087249.113**	**748941.022**	**Arsenic**	**33.300**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CV37-025	2087249.113	748941.022	Barium	731.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CV37-025	2087249.113	748941.022	Vanadium	94.100	NA	7150.000	88.490	mg/kg	0.5	2.5
CV37-026	2087238.020	748951.418	Arsenic	19.900	NA	22.200	10.090	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Barium	789.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Chromium	37.900	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Iron	40000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Manganese	400.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Nickel	54.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Strontium	176.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Vanadium	101.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-026	2087238.020	748951.418	Arsenic	15.800	NA	22.200	13.140	mg/kg	0.5	2.0
CV37-026	2087238.020	748951.418	Barium	852.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-026	2087238.020	748951.418	Copper	42.400	NA	40900.000	38.210	mg/kg	0.5	2.0
CV37-026	2087238.020	748951.418	Vanadium	92.900	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-027	2087232.034	748969.012	Arsenic	17.800	NA	22.200	10.090	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Barium	802.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Chromium	55.100	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Iron	28000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Nickel	37.200	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Strontium	208.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Vanadium	92.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Zinc	89.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-027	2087232.034	748969.012	Barium	704.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-027	2087232.034	748969.012	Copper	43.800	NA	40900.000	38.210	mg/kg	0.5	2.0
CV37-027	2087232.034	748969.012	Vanadium	107.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-028	2087225.741	748956.831	Barium	753.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-028	2087225.741	748956.831	Chromium	50.100	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-028	2087225.741	748956.831	Iron	28900.000	NA	307000.000	18037.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-028	2087225.741	748956.831	Manganese	464.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV37-028	2087225.741	748956.831	Nickel	37.100	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-028	2087225.741	748956.831	Strontium	218.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-028	2087225.741	748956.831	Vanadium	109.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-028	2087225.741	748956.831	Zinc	86.100	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-028	**2087225.741**	**748956.831**	**Arsenic**	**31.400**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CV37-028	2087225.741	748956.831	Barium	775.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-028	2087225.741	748956.831	Lead	81.400	NA	1000.000	24.970	mg/kg	0.5	2.0
CV37-029	2087221.315	748945.713	Barium	995.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Chromium	37.600	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Copper	53.400	NA	40900.000	18.060	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Iron	33300.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Manganese	461.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Nickel	43.200	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Selenium	4.780	NA	5110.000	1.224	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Vanadium	106.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Zinc	85.300	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-029	2087221.315	748945.713	Barium	954.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-029	2087221.315	748945.713	Strontium	280.000	NA	613000.000	211.380	mg/kg	0.5	2.0
CV37-029	2087221.315	748945.713	Vanadium	102.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CV37-030	**2087219.218**	**748928.525**	**Arsenic**	**31.100**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CV37-030	2087219.218	748928.525	Barium	6830.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-030	2087219.218	748928.525	Chromium	22.700	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-030	2087219.218	748928.525	Iron	21900.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-030	2087219.218	748928.525	Lead	73.700	NA	1000.000	54.620	mg/kg	0.0	0.5
CV37-030	2087219.218	748928.525	Nickel	29.400	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-030	2087219.218	748928.525	Strontium	254.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-030	2087219.218	748928.525	Vanadium	59.500	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-030	**2087219.218**	**748928.525**	**Arsenic**	**25.000**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CV37-030	2087219.218	748928.525	Barium	3080.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-031	2087232.295	748927.743	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Antimony	0.620	NA	409.000	0.470	mg/kg	0.0	0.5
CV37-031	**2087232.295**	**748927.743**	**Arsenic**	**27.400**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV37-031	2087232.295	748927.743	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Barium	785.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Chromium	45.900	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Chromium	17.000	NA	268.000	16.990	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Cobalt	14.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Iron	30700.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Lithium	12.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Nickel	33.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Nickel	40.900	NA	20400.000	14.910	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Strontium	209.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Strontium	63.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Vanadium	107.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CV37-031	2087232.295	748927.743	Zinc	110.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CV37-031	**2087232.295**	**748927.743**	**Arsenic**	**25.500**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CV37-031	2087232.295	748927.743	Barium	789.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CV37-031	2087232.295	748927.743	Lead	110.000	NA	1000.000	24.970	mg/kg	0.5	2.0
CV37-031	2087232.295	748927.743	Strontium	215.000	NA	613000.000	211.380	mg/kg	0.5	2.0
CV37-031	2087232.295	748927.743	Vanadium	104.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CW31-008	2087292.040	747712.694	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW31-008	2087292.040	747712.694	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW31-008	2087292.040	747712.694	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW31-008	2087292.040	747712.694	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW31-008	2087292.040	747712.694	Manganese	380.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CW31-008	2087292.040	747712.694	Nickel	17.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW31-008	2087292.040	747712.694	Vanadium	51.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW32-000	2087345.815	747769.507	Antimony	2.300	NA	409.000	0.470	mg/kg	0.0	0.5
CW32-000	2087345.815	747769.507	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW32-000	2087345.815	747769.507	Copper	48.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CW32-000	2087345.815	747769.507	Lead	530.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CW32-000	2087345.815	747769.507	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW32-000	2087345.815	747769.507	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW32-004	2087266.449	747821.633	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW32-004	2087266.449	747821.633	Manganese	470.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Chromium	24.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Manganese	380.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Nickel	17.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW32-005	2087280.308	747763.053	Vanadium	50.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Arsenic	19.800	NA	22.200	10.090	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Barium	788.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Chromium	35.800	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Iron	30600.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Nickel	39.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Strontium	218.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-010	2087233.836	748916.271	Vanadium	103.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-010	**2087233.836**	**748916.271**	**Arsenic**	**23.000**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CW37-010	2087233.836	748916.271	Barium	931.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CW37-010	2087233.836	748916.271	Strontium	237.000	NA	613000.000	211.380	mg/kg	0.5	2.5
CW37-010	2087233.836	748916.271	Vanadium	103.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CW37-011	**2087243.335**	**748901.887**	**Arsenic**	**32.800**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CW37-011	2087243.335	748901.887	Barium	716.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-011	2087243.335	748901.887	Chromium	57.600	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-011	2087243.335	748901.887	Iron	24800.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-011	2087243.335	748901.887	Nickel	34.800	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-011	2087243.335	748901.887	Strontium	178.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-011	2087243.335	748901.887	Vanadium	102.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-011	**2087243.335**	**748901.887**	**Arsenic**	**22.400**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.0**
CW37-011	2087243.335	748901.887	Barium	695.000	NA	26400.000	289.380	mg/kg	0.5	2.0
CW37-011	2087243.335	748901.887	Vanadium	104.000	NA	7150.000	88.490	mg/kg	0.5	2.0
CW37-012	**2087231.763**	**748887.888**	**Antimony**	**433.000**	**NA**	**409.000**	**0.470**	**mg/kg**	**0.0**	**0.5**

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW37-012	**2087231.763**	**748887.888**	**Arsenic**	**1080.000**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CW37-012	2087231.763	748887.888	Barium	793.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Chromium	40.900	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Iron	24400.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-012	**2087231.763**	**748887.888**	**Lead**	**14300.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CW37-012	2087231.763	748887.888	Mercury	13.500	NA	25200.000	0.134	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Nickel	30.600	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Selenium	51.500	NA	5110.000	1.224	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Tin	86.900	NA	613000.000	2.900	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Vanadium	112.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-012	2087231.763	748887.888	Antimony	149.000	NA	409.000	16.970	mg/kg	0.5	2.5
CW37-012	**2087231.763**	**748887.888**	**Arsenic**	**333.000**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CW37-012	2087231.763	748887.888	Barium	652.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CW37-012	**2087231.763**	**748887.888**	**Lead**	**4960.000**	**NA**	**1000.000**	**24.970**	**mg/kg**	**0.5**	**2.5**
CW37-012	2087231.763	748887.888	Mercury	5.180	NA	25200.000	1.520	mg/kg	0.5	2.5
CW37-012	2087231.763	748887.888	Selenium	19.200	NA	5110.000	4.800	mg/kg	0.5	2.5
CW37-012	2087231.763	748887.888	Vanadium	94.800	NA	7150.000	88.490	mg/kg	0.5	2.5
CW37-013	2087246.759	748878.720	Arsenic	17.600	NA	22.200	10.090	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Barium	860.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Chromium	58.800	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Iron	28700.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Nickel	38.100	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Strontium	234.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Vanadium	101.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-013	2087246.759	748878.720	Barium	968.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CW37-013	2087246.759	748878.720	Strontium	242.000	NA	613000.000	211.380	mg/kg	0.5	2.5
CW37-013	2087246.759	748878.720	Vanadium	106.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CW37-014	**2087245.962**	**748865.692**	**Arsenic**	**30.900**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CW37-014	2087245.962	748865.692	Barium	834.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-014	2087245.962	748865.692	Chromium	44.100	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-014	2087245.962	748865.692	Iron	29400.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-014	2087245.962	748865.692	Nickel	39.100	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-014	2087245.962	748865.692	Strontium	228.000	NA	613000.000	48.940	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW37-014	2087245.962	748865.692	Vanadium	106.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-014	2087245.962	748865.692	Antimony	20.400	NA	409.000	16.970	mg/kg	0.5	2.5
CW37-014	**2087245.962**	**748865.692**	**Arsenic**	**55.600**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CW37-014	2087245.962	748865.692	Barium	861.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CW37-014	2087245.962	748865.692	Lead	589.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CW37-014	2087245.962	748865.692	Mercury	1.800	NA	25200.000	1.520	mg/kg	0.5	2.5
CW37-014	2087245.962	748865.692	Vanadium	98.600	NA	7150.000	88.490	mg/kg	0.5	2.5
CW37-015	2087261.968	748843.817	Antimony	13.800	NA	409.000	0.470	mg/kg	0.0	0.5
CW37-015	**2087261.968**	**748843.817**	**Arsenic**	**47.000**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CW37-015	2087261.968	748843.817	Barium	745.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-015	2087261.968	748843.817	Chromium	33.400	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-015	2087261.968	748843.817	Iron	34100.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-015	2087261.968	748843.817	Lead	278.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CW37-015	2087261.968	748843.817	Nickel	48.300	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-015	2087261.968	748843.817	Strontium	182.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-015	2087261.968	748843.817	Vanadium	113.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-015	**2087261.968**	**748843.817**	**Arsenic**	**69.000**	**NA**	**22.200**	**13.140**	**mg/kg**	**0.5**	**2.5**
CW37-015	2087261.968	748843.817	Barium	810.000	NA	26400.000	289.380	mg/kg	0.5	2.5
CW37-015	2087261.968	748843.817	Lead	548.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CW37-015	2087261.968	748843.817	Vanadium	102.000	NA	7150.000	88.490	mg/kg	0.5	2.5
CX31-002	2087182.162	747849.519	Antimony	0.540	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-002	2087182.162	747849.519	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-002	2087182.162	747849.519	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-002	2087182.162	747849.519	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-002	2087182.162	747849.519	Manganese	450.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-002	2087182.162	747849.519	Nickel	17.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-003	2087191.300	747783.051	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-003	2087191.300	747783.051	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-003	2087191.300	747783.051	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-003	2087191.300	747783.051	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-003	2087191.300	747783.051	Manganese	370.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-003	2087191.300	747783.051	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-031	2087354.533	747741.347	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-031	2087354.533	747741.347	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-031	2087354.533	747741.347	Lead	92.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-031	2087354.533	747741.347	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-031	2087354.533	747741.347	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-031	2087354.533	747741.347	Vanadium	48.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-032	2087363.282	747712.674	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Antimony	0.640	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Chromium	24.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Lead	63.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-033	2087373.646	747676.243	Vanadium	49.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-035	2087385.384	747638.042	Aluminum	19000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-035	2087385.384	747638.042	Chromium	20.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-035	2087385.384	747638.042	Lead	64.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-035	2087385.384	747638.042	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-035	2087385.384	747638.042	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Aluminum	23000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Antimony	2.700	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Copper	58.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Lead	620.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Lithium	21.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Manganese	420.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Nickel	20.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Selenium	1.300	NA	5110.000	1.224	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-036	2087371.453	747761.337	Tin	3.100	NA	613000.000	2.900	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Vanadium	56.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-036	2087371.453	747761.337	Zinc	76.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-036	**2087371.453**	**747761.337**	**Lead**	**1400.000**	**NA**	**1000.000**	**24.970**	**mg/kg**	**0.5**	**2.0**
CX31-037	2087379.683	747736.947	Antimony	0.530	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-037	2087379.683	747736.947	Lead	92.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-038	2087387.942	747710.469	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-038	2087387.942	747710.469	Antimony	19.000	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-038	2087387.942	747710.469	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-038	2087387.942	747710.469	Copper	27.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-038	**2087387.942**	**747710.469**	**Lead**	**4900.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CX31-038	2087387.942	747710.469	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-038	2087387.942	747710.469	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-038	2087387.942	747710.469	Vanadium	48.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-039	2087398.854	747676.132	Antimony	19.000	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-039	2087398.854	747676.132	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-039	2087398.854	747676.132	Copper	44.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-039	**2087398.854**	**747676.132**	**Lead**	**5300.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CX31-039	2087398.854	747676.132	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-039	2087398.854	747676.132	Lead	96.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CX31-040	2087411.380	747639.732	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Lead	77.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-040	2087411.380	747639.732	Vanadium	46.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Aluminum	23000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Antimony	1.600	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Copper	32.000	NA	40900.000	18.060	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-041	2087396.352	747756.677	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Lead	390.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-041	2087396.352	747756.677	Vanadium	51.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Beryllium	0.980	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Chromium	24.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Copper	26.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Lead	180.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Lithium	18.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-042	2087403.205	747734.856	Vanadium	47.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Aluminum	27000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Antimony	2.800	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Chromium	70.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Copper	38.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Lead	620.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Lithium	18.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Nickel	38.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-043	2087412.286	747710.886	Vanadium	60.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Aluminum	18000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Antimony	0.740	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Chromium	20.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Copper	20.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Lead	140.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-044	2087422.640	747678.385	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-045	2087435.671	747641.526	Antimony	0.480	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-045	2087435.671	747641.526	Lead	84.000	NA	1000.000	54.620	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-045	2087435.671	747641.526	Manganese	400.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-045	2087435.671	747641.526	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Aluminum	24000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Antimony	3.400	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Beryllium	0.980	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Chromium	33.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Copper	53.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Lead	1000.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Lithium	20.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Manganese	380.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Nickel	20.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-046	2087419.210	747754.825	Vanadium	54.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Antimony	0.940	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Copper	26.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Lead	340.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-047	2087427.007	747734.031	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Antimony	5.100	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Copper	52.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-048	**2087434.846**	**747711.782**	**Lead**	**1500.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CX31-048	2087434.846	747711.782	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-048	2087434.846	747711.782	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Tin	3.100	NA	613000.000	2.900	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Vanadium	46.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-048	2087434.846	747711.782	Lead	240.000	NA	1000.000	24.970	mg/kg	0.5	1.5
CX31-049	2087446.257	747681.511	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Antimony	1.400	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Chromium	28.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Copper	27.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Lead	250.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-049	2087446.257	747681.511	Vanadium	47.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-050	2087460.441	747642.835	Antimony	0.630	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-050	2087460.441	747642.835	Chromium	17.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-050	2087460.441	747642.835	Lead	75.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-050	2087460.441	747642.835	Manganese	370.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-050	2087460.441	747642.835	Lead	35.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CX31-051	2087442.699	747752.611	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Antimony	0.890	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Copper	25.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Lead	210.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Lithium	19.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Vanadium	47.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-051	2087442.699	747752.611	Lead	67.000	NA	1000.000	24.970	mg/kg	0.5	2.5
CX31-052	2087450.044	747733.051	Aluminum	23000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-052	2087450.044	747733.051	Antimony	0.630	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Barium	200.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Chromium	24.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Copper	270.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Lead	350.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Vanadium	51.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-052	2087450.044	747733.051	Zinc	96.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Aluminum	27000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Antimony	2.500	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Chromium	26.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Copper	31.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Lead	520.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Lithium	18.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-053	2087459.121	747710.531	Vanadium	56.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-054	2087471.278	747679.243	Antimony	1.900	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-054	2087471.278	747679.243	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-054	2087471.278	747679.243	Copper	32.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-054	2087471.278	747679.243	Lead	480.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-054	2087471.278	747679.243	Lithium	12.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-054	2087471.278	747679.243	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-055	2087486.054	747641.079	Lead	57.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Antimony	0.730	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-056	2087516.926	747740.450	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Lead	190.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Lithium	19.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-056	2087516.926	747740.450	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Antimony	1.700	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Copper	29.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Lead	620.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-057	2087530.340	747712.668	Strontium	54.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Antimony	4.300	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Copper	140.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-058	**2087449.075**	**747704.370**	**Lead**	**1700.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CX31-058	2087449.075	747704.370	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Vanadium	49.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-058	2087449.075	747704.370	Zinc	180.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Antimony	2.200	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-059	2087426.110	747697.873	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Copper	39.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Lead	630.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-059	2087426.110	747697.873	Vanadium	48.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Antimony	7.900	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Chromium	20.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Copper	68.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-074	**2087493.116**	**747710.065**	**Lead**	**3100.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CX31-074	2087493.116	747710.065	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-074	2087493.116	747710.065	Zinc	77.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Antimony	5.500	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Copper	370.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-075	**2087505.102**	**747680.782**	**Lead**	**1700.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CX31-075	2087505.102	747680.782	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-075	2087505.102	747680.782	Zinc	83.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Antimony	0.990	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Copper	33.000	NA	40900.000	18.060	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-076	2087530.962	747730.017	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Lead	610.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Lithium	18.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-076	2087530.962	747730.017	Vanadium	46.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Barium	577.000	NA	26400.000	188.170	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Chromium	33.600	NA	268.000	23.230	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Copper	206.000	NA	40900.000	27.270	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Iron	39100.000	NA	307000.000	21379.010	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Lead	222.000	NA	1000.000	95.600	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Manganese	1600.000	NA	3480.000	659.220	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Mercury	2.570	NA	25200.000	0.340	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Nickel	47.900	NA	20400.000	17.890	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Selenium	3.040	NA	5110.000	1.550	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Silver	2.650	NA	5110.000	2.280	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Strontium	260.000	NA	613000.000	201.440	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Vanadium	112.000	NA	7150.000	46.830	mg/kg	0.0	0.5
CX32-001	2087356.851	747868.649	Zinc	115.000	NA	307000.000	104.400	mg/kg	0.0	0.5
CX32-002	2087346.724	747868.719	Americium-241	0.595	NA	76.000	0.270	pCi/g	0.0	0.5
CX32-002	2087346.724	747868.719	Manganese	670.000	NA	3480.000	659.220	mg/kg	0.0	0.5
CX32-002	2087346.724	747868.719	Plutonium-239/240	3.490	NA	50.000	1.350	pCi/g	0.0	0.5
CX32-002	2087346.724	747868.719	Selenium	1.600	NA	5110.000	1.550	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Aluminum	28000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Antimony	1.200	NA	409.000	0.470	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Chromium	27.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Copper	26.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Lead	250.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Lithium	20.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX32-005	2087436.982	747764.884	Vanadium	57.000	NA	7150.000	45.590	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CY28-000	2087690.545	747009.922	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY28-000	2087690.545	747009.922	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CY28-000	2087690.545	747009.922	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-008	2087542.459	747685.862	Antimony	2.500	NA	409.000	0.470	mg/kg	0.0	0.5
CY31-008	2087542.459	747685.862	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-008	2087542.459	747685.862	Copper	48.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CY31-008	2087542.459	747685.862	Iron	26000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-008	**2087542.459**	**747685.862**	**Lead**	**1700.000**	**NA**	**1000.000**	**54.620**	**mg/kg**	**0.0**	**0.5**
CY31-008	2087542.459	747685.862	Manganese	440.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CY31-008	2087542.459	747685.862	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-008	2087542.459	747685.862	Strontium	53.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Barium	210.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Copper	20.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Lead	130.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Nickel	20.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-009	2087592.341	747726.509	Vanadium	55.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Aluminum	25000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Antimony	0.650	NA	409.000	0.470	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Beryllium	1.400	NA	921.000	0.966	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Chromium	28.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Copper	23.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Iron	38000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Lead	160.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Lithium	20.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Manganese	550.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Nickel	23.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Vanadium	59.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CY31-010	2087607.546	747699.324	Zinc	77.000	NA	307000.000	73.760	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CY31-011	2087625.314	747665.914	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Barium	190.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Chromium	22.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Iron	20000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Lead	55.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Manganese	380.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-011	2087625.314	747665.914	Vanadium	47.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CY31-012	2087678.272	747699.656	Aluminum	18000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CY31-012	2087678.272	747699.656	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-012	2087678.272	747699.656	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY31-012	2087678.272	747699.656	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-012	2087678.272	747699.656	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CY31-012	2087678.272	747699.656	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Aluminum	23000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Antimony	0.550	NA	409.000	0.470	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Chromium	24.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Copper	30.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Lead	92.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Lithium	18.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Manganese	490.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-013	2087690.393	747679.333	Vanadium	51.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Aluminum	25000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Barium	230.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Iron	23000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Lithium	19.000	NA	20400.000	11.550	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CY31-014	2087701.758	747660.270	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CY31-014	2087701.758	747660.270	Vanadium	50.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Barium	628.000	NA	26400.000	188.170	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Chromium	43.000	NA	268.000	23.230	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Iron	41500.000	NA	307000.000	21379.010	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Lead	140.000	NA	1000.000	95.600	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Manganese	2340.000	NA	3480.000	659.220	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Mercury	3.480	NA	25200.000	0.340	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Nickel	51.300	NA	20400.000	17.890	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Selenium	3.030	NA	5110.000	1.550	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Silver	2.840	NA	5110.000	2.280	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Strontium	255.000	NA	613000.000	201.440	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Vanadium	83.900	NA	7150.000	46.830	mg/kg	0.0	0.5
CY32-000	2087695.219	747785.121	Zinc	121.000	NA	307000.000	104.400	mg/kg	0.0	0.5
CZ28-000	2087833.788	746962.204	Barium	160.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CZ28-000	2087833.788	746962.204	Beryllium	0.980	NA	921.000	0.966	mg/kg	0.0	0.5
CZ28-000	2087833.788	746962.204	Cobalt	12.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CZ28-000	2087833.788	746962.204	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CZ28-000	2087833.788	746962.204	Nickel	28.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CZ28-000	2087833.788	746962.204	Strontium	71.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Lead	66.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Lithium	12.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Manganese	540.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CZ31-004	2087749.485	747710.490	Nickel	25.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Aluminum	27000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Barium	210.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Chromium	28.000	NA	268.000	16.990	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Copper	20.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Iron	25000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CZ31-005	2087763.843	747689.815	Lithium	20.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Manganese	410.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CZ31-005	2087763.843	747689.815	Vanadium	58.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Aluminum	25000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Barium	200.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Strontium	51.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CZ31-006	2087780.751	747664.510	Vanadium	52.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Aluminum	19000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Iron	19000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Lithium	12.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Nickel	17.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CZ31-007	2087825.911	747720.901	Strontium	62.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CZ31-008	2087843.579	747696.581	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CZ31-008	2087843.579	747696.581	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CZ31-008	2087843.579	747696.581	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CZ31-008	2087843.579	747696.581	Strontium	50.000	NA	613000.000	48.940	mg/kg	0.0	0.5
DA31-002	2087947.950	747676.168	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
DA31-002	2087947.950	747676.168	Antimony	0.520	NA	409.000	0.470	mg/kg	0.0	0.5
DA31-002	2087947.950	747676.168	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
DA31-002	2087947.950	747676.168	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
DA31-002	2087947.950	747676.168	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Antimony	0.490	NA	409.000	0.470	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
DA31-003	2087991.721	747622.849	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Iron	24000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Manganese	370.000	NA	3480.000	365.080	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Strontium	51.000	NA	613000.000	48.940	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Vanadium	57.000	NA	7150.000	45.590	mg/kg	0.0	0.5
DA31-003	2087991.721	747622.849	Zinc	83.000	NA	307000.000	73.760	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Chromium	23.000	NA	268.000	16.990	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Iron	22000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Strontium	50.000	NA	613000.000	48.940	mg/kg	0.0	0.5
DA31-004	2088026.817	747581.586	Vanadium	53.000	NA	7150.000	45.590	mg/kg	0.0	0.5

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OVER-SIZED MAP / PLATE FOR THIS DOCUMENT:
(Ref: 04-RF-01288; KLW-057-04)

Draft Closeout Report for IHSS Group 900-11 PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 3:

IHSS Group 900-11 PAC SE-1602 East Firing Range Berm Area Characterization Sample Locations and Results

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range.apr

December 1, 2004

CERCLA Administrative Record Document, BZ-A-000776

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64

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Draft Closeout Report for IHSS Group 900-11 PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 4:

IHSS Group 900-11 PAC SE-1602 East Firing Range South of Trench Area Characterization Sample Locations and Results

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range.apr

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Draft Closeout Report for IHSS Group 900-11
PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 5:

IHSS Group 900-11 PAC SE-1602 East Firing Range Outer South Area Characterization Sample Locations and Results

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range.apr

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66

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Draft Closeout Report for IHSS Group 900-11 PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 6:

IHSS Group 900-11 PAC SE-1602 East Firing Range South Central Area Characterization Sample Locations and Results

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range.apr

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67

Characterization data indicate that contaminant concentrations were less than RFCA WRW ALs at 83 of 115 sampling locations. Seven characterization locations had no results greater than background means plus two standard deviations or reporting limits: CV32-002, CV32-003, CW31-007, CX32-001, CX32-002, CY32-000, and CZ31-009. These were all from the STA area and none were background samples. Characterization sampling results indicated that locations with WRW AL exceedances were generally surrounded by locations with results less than WRW ALs. WRW AL exceedances are summarized below.

- The antimony concentration at CW37-012 (berm) exceeded the WRW AL in the surface sample. The result was 433 milligrams per kilogram (mg/kg) as detected using the SW-846 6200 method.
- Copper at CV36-021 (trench) exceeded the WRW AL in the subsurface. The concentration was 130000 mg/kg via the SW-846 6010 method.
- Arsenic concentrations exceeded the WRW AL at 20 locations in the surface and 18 locations in the subsurface. All characterization exceedances for arsenic were the result of analyses performed using the SW-846 6200 method and all were located at the berm. The range in concentration was from; surface-24.1 to 1080 mg/kg and subsurface-22.4 to 333 mg/kg.
- Lead concentrations exceeded the WRW AL at 10 locations in the surface and 5 in the subsurface. For surface locations there were two exceedances in the trench area, one in the berm and seven in the STA. There were two subsurface exceedances for lead in the trench area, two in the berm, and one in the STA. One lead result in the surface and one in the subsurface were by the SW-846 6200 method, the other 13 were by SW-846 6010. Surface lead ranged from 1500 to 14300 mg/kg and subsurface from 1400 to 10000 mg/kg.

Note that uranium metal above background means plus two standard deviations has not been found in samples associated with this study. This is significant with respect to the potential use of depleted uranium bullets, however briefly, at the East Firing Range.

Summary statistics, by analyte, were calculated for the East Firing Range sampling locations, as presented in Tables 4, 5 and 6. These summaries are based on detections only and include both characterization and confirmation sample data. Metal analytes that were not detected are not represented in the tables.

Table 4
IHSS Group 900-11, PAC SE-1602 East Firing Range
Surface Soil Summary Statistics

Analyte	Number of Samples Analyzed	Detection Frequency	Mean Concentration	Maximum Concentration	Background Mean Plus 2 Standard Deviations	WRW AL	Unit
Aluminum	104	75.00%	23730.769	37000	16902.000	228000	mg/kg
Antimony	129	36.43%	11.841	433	0.470	409	mg/kg
Arsenic	129	16.28%	82.805	1080	10.090	22.2	mg/kg

Analyte	Number of Samples Analyzed	Detection Frequency	Mean Concentration	Maximum Concentration	Background Mean Plus 2 Standard Deviations	WRW AL	Unit
Barium	129	77.52%	397.600	6830	141.260	26400	mg/kg
Beryllium	104	59.62%	1.137	1.5	0.966	921	mg/kg
Chromium	129	89.15%	29.293	70	16.990	268	mg/kg
Cobalt	129	10.08%	11.700	14	10.910	1550	mg/kg
Copper	129	47.29%	39.657	370	18.060	40900	mg/kg
Iron	129	74.42%	24553.125	41600	18037.000	307000	mg/kg
Lead	115	52.17%	798.290	14300	54.620	1000	mg/kg
Lithium	104	83.65%	16.931	26	11.550	20400	mg/kg
Manganese	129	32.56%	532.405	1200	365.080	3480	mg/kg
Mercury	129	0.78%	13.500	13.5	0.134	25200	mg/kg
Nickel	129	89.15%	24.324	60.7	14.910	20400	mg/kg
Selenium	129	4.65%	10.582	51.5	1.224	5110	mg/kg
Strontium	129	34.11%	129.250	254	48.940	613000	mg/kg
Tin	129	3.88%	19.920	86.9	2.900	613000	mg/kg
Vanadium	129	67.44%	68.267	134	45.590	7150	mg/kg
Zinc	129	20.93%	89.067	180	73.760	307000	mg/kg

Table 5
IHSS Group 900-11, PAC SE-1602 East Firing Range
Subsurface Soil Summary Statistics

Analyte	Number of Samples Analyzed	Detection Frequency	Mean Concentration	Maximum Concentration	Background Mean Plus 2 Standard Deviations	WRW AL	Unit
Aluminum	42	9.52%	36250.000	37000	35373.17	228000	mg/kg
Antimony	68	10.29%	82.629	260	16.97	409	mg/kg
Arsenic	68	26.47%	51.128	333	13.14	22.2	mg/kg
Barium	68	57.35%	705.077	3080	289.38	26400	mg/kg
Copper	68	14.71%	13131.660	130000	38.21	40900	mg/kg
Iron	68	1.47%	41200.000	41200	41046.52	307000	mg/kg
Lead	55	60.00%	1395.952	10000	24.97	1000	mg/kg
Manganese	68	4.41%	1046.667	1300	901.62	3480	mg/kg
Mercury	68	2.94%	3.490	5.18	1.52	25200	mg/kg
Selenium	68	1.47%	19.200	19.2	4.8	5110	mg/kg
Strontium	68	5.88%	245.500	280	211.38	613000	mg/kg
Vanadium	68	32.35%	104.877	127	88.49	7150	mg/kg
Zinc	68	1.47%	6600.000	6600	139.1	307000	mg/kg

Table 6
IHSS Group 900-11, PAC SE-1602 East Firing Range
Sediment Summary Statistics

Analyte	Number of Samples Analyzed	Detection Frequency	Mean Concentration	Maximum Concentration	Background Mean Plus 2 Standard Deviations	WRW AL	Unit
Americium-241	1	100.00%	0.595	0.595	0.27	76	pCi/g
Barium	3	66.67%	602.500	628	188.17	26400	mg/kg
Chromium	3	66.67%	38.300	43	23.23	268	mg/kg
Copper	3	33.33%	206.000	206	27.27	40900	mg/kg
Iron	3	66.67%	40300.000	41500	21379.01	307000	mg/kg
Lead	3	66.67%	181.000	222	95.6	1000	mg/kg
Manganese	3	100.00%	1536.667	2340	659.22	3480	mg/kg
Mercury	3	66.67%	3.025	3.48	0.34	25200	mg/kg
Nickel	3	66.67%	49.600	51.3	17.89	20400	mg/kg
Plutonium-239/240	1	100.00%	3.490	3.49	1.35	50	pCi/g
Selenium	3	100.00%	2.557	3.04	1.55	5110	mg/kg
Silver	3	66.67%	2.745	2.84	2.28	5110	mg/kg
Strontium	3	66.67%	257.500	260	201.44	613000	mg/kg
Vanadium	3	66.67%	97.950	112	46.83	7150	mg/kg
Zinc	3	66.67%	118.000	121	104.4	307000	mg/kg

2.3 Sum of Ratios

Rocky Flats Cleanup Agreement (RFCA) (DOE et al. 2003) radionuclide sums of ratios (SORs) were not calculated for the East Firing Range because there were no surface or subsurface soil results for radionuclides.

Surface soil and sediment (0.0-3.0 ft) SORs for non-radionuclide COCs are shown in Table 7. Non-radionuclide SORs were calculated for all locations with analytical results greater than 10 percent of the WRW ALs. Aluminum, arsenic, iron, and manganese were not included in the non-radionuclide SORs. Ten locations have non-radionuclide SORs with values greater than 1. Nine of these locations (characterization locations CW37-012, CX31-038, CX38-039, CX31-048, CX31-058, CX31-074, and CX31-075, and CY31-008; and in-process confirmation location CW37-020) had results greater than the WRW ALs. The tenth location, CX31-046, had a lead detection of 1000 milligram per kilogram (mg/kg), equal to the lead WRW AL. All ten locations with SORs greater than or equal to 1 lie within excavation boundaries and have been remediated.

Table 7
IHSS Group 900-11, PAC SE-1602 East Firing Range
Non-Radionuclide Surface SORs

Location Code	Start Depth (ft)	End Depth (ft)	SOR to WRW
CV35-000	0	0.5	0.101
CV35-001	0	0.5	0.101
CV35-002	0	0.5	0.119
CV35-003	0	0.5	0.119
CV35-004	0	0.5	0.112
CV35-005	0	0.5	0.123
CV36-009	0	0.5	0.116
CV36-010	0	0.5	0.183
CV36-011	0	0.5	0.119
CV36-012	0	0.5	0.266
CV36-013	0	0.5	0.229
CV37-009	0	0.5	0.412
CV37-010	0	0.5	0.171
CV37-011	0	0.5	0.172
CV37-012	0	0.5	0.203
CV37-013	0	0.5	0.705
CV37-015	0	0.5	0.197
CV37-017	0	0.5	0.167
CV37-018	0	0.5	0.673
CV37-019	0	0.5	0.475
CV37-020	0	0.5	0.186
CV37-021	0	0.5	0.488
CV37-022	0	0.5	0.251
CV37-024	0	0.5	0.190
CV37-025	0	0.5	0.134
CV37-026	0	0.5	0.141
CV37-027	0	0.5	0.206
CV37-028	0	0.5	0.187
CV37-029	0	0.5	0.140
CV37-030	0	0.5	0.259
CW32-000	0	0.5	0.530
CW37-010	0	0.5	0.134
CW37-011	0	0.5	0.215
CW37-012	0	0.5	15.511
CW37-013	0	0.5	0.219
CW37-014	0	0.5	0.165
CW37-015	0	0.5	0.403
CW37-020	2	2.5	1.200
CW37-024	2.5	3	0.104

Location Code	Start Depth (ft)	End Depth (ft)	SOR to WRW
CX31-036	0	0.5	0.620
CX31-038	0	0.5	4.900
CX31-039	0	0.5	5.300
CX31-041	0	0.5	0.390
CX31-042	0	0.5	0.180
CX31-043	0	0.5	0.881
CX31-044	0	0.5	0.140
CX31-046	0	0.5	1.123
CX31-047	0	0.5	0.340
CX31-048	0	0.5	1.500
CX31-049	0	0.5	0.354
CX31-051	0	0.5	0.210
CX31-052	0	0.5	0.350
CX31-053	0	0.5	0.520
CX31-054	0	0.5	0.480
CX31-056	0	0.5	0.190
CX31-057	0	0.5	0.620
CX31-058	0	0.5	1.700
CX31-059	0	0.5	0.630
CX31-063	1	1.2	0.101
CX31-064	0.75	1	0.116
CX31-065	1.1	1.3	0.127
CX31-066	1	1.2	0.104
CX31-068	1	1.2	0.104
CX31-069	1	1.2	0.119
CX31-074	0	0.5	3.100
CX31-075	0	0.5	1.700
CX31-076	0	0.5	0.610
CX32-001(Sed)	0	0.5	0.347
CX32-004	0	0.5	0.120
CX32-005	0	0.5	0.351
CY31-008	0	0.5	1.700
CY31-009	0	0.5	0.130
CY31-010	0	0.5	0.264
CY32-000 (Sed)	0	0.5	0.300
CZ31-005	0	0.5	0.104

3.0 ACCELERATED ACTION

Remedial action objectives (RAOs) were developed and described in Section 3.0 of the 903 IM/IRA (DOE 2004b). The 903 IM/IRA RAOs for soil are summarized in Table 8.

Table 8
IHSS Group 900-11 Remedial Action Objectives

Contaminant of Concern	Depth	Remedial Action Objective
Lead	0 – 0.5 feet	1000 mg/kg or less
Arsenic	0 – 0.5 feet	22.2 mg/kg or less
Antimony	0 – 0.5 feet	40.9 mg/kg or less

Based on the consultative process (Regulatory Contact Record 11/2/2004) the RAOs were modified as follows;

- The RAO for arsenic was changed to 35 mg/kg.
- In the berm area, soil above RAOs will be excavated and shipped off-site. The excavation will be to approximately 2 ft below ground surface (bgs). Biased confirmation samples will be collected at the original characterization sample locations.
- After berm excavation is complete the berm will be graded to eliminate steep, vertical slopes. Erosion mat and seed will be placed on exposed areas of the berm upon completion of the remediation.
- Soil will be excavated from a 50 ft x 15 ft area that includes the six coffin areas to a depth of approximately 3 ft bgs. One confirmation sample will be collected in the each of the 15 ft sides, 2 in each of the 50 ft sides and 2 confirmation samples spaced evenly in the bottom. Confirmation samples will be analyzed for metals (EPA method 6010). After excavation and sampling are completed, the excavation will be back filled with on-site soil, seeded and erosion mat will be placed on exposed areas.
- In the STA, excavation will take place to remove lead contaminated soil that exceeds WRW ALs and may represent a potential ecological risk to Prebble's Meadow Jumping Mice. Best management practices (BMPs) will be implemented during excavation activities to minimize detrimental impacts. Approximately 6 inches of soil will be excavated from two areas. Confirmation samples will be collected and analyzed for metals (EPA method 6010). Statistical confirmation samples will be located on a 32-foot sample interval. Additional biased confirmation samples will be selectively used to confirm remediation. Additional excavation will be based on confirmation sample results relative to WRW ALs for lead and with consideration of Preble's meadow jumping mouse ecological screening levels. Upon completion of the excavation, the area will be backfilled with clean on-site soil, seeded, and erosion controls put in place.
- Additional evaluation of the East Firing Range area will occur as part of the Comprehensive Risk Assessment.

Accelerated action activities were conducted between June 16, 2004 and December 13, 2004. Start and end dates of significant activities are listed in Table 9. Key components removed during the accelerated action and remaining after the action are shown on Figure 7. Photographs of site activities are provided in Appendix B.

73

Table 9
Dates of Accelerated Action Activities

Activity	Start Date	End Date	Duration
Characterization Sampling	6/16/2004	9/13/2004	3.0 months
Removal Activities	11/15/2004	12/07/04	0.75 months
Confirmation Sampling	11/15/2004	12/13/04	1.0 months
Site Reclamation	11/15/04	TBD	TBD

TBD = to be determined

3.1 Removal Activities

All accelerated action objectives were achieved. Soil removal activities were completed on 12/07/2004 based on confirmation sample results. The areas of soil and asphalt removal are shown on Figure 7. To date (12/07/04) 520 cubic yards (cy) of soil have been removed.

Removal of soil in parts of the trench area, berm, and STA required two rounds of soil removal. Results above background means plus two standard deviations for these in-process confirmation samples are shown in Table 10 with WRW AL exceedances in bold. In the trench area the excavation to 3 ft bgs was extended. In the berm an additional 2 ft of soil was removed at each in-process location. In the STA either the first 6 inches of soil from areas around the outside the original excavation was removed or an additional 6 inches was removed if the in-process location was within the original excavation. Confirmation samples were collected from each in-process location.

4.0 CONFIRMATION SAMPLING

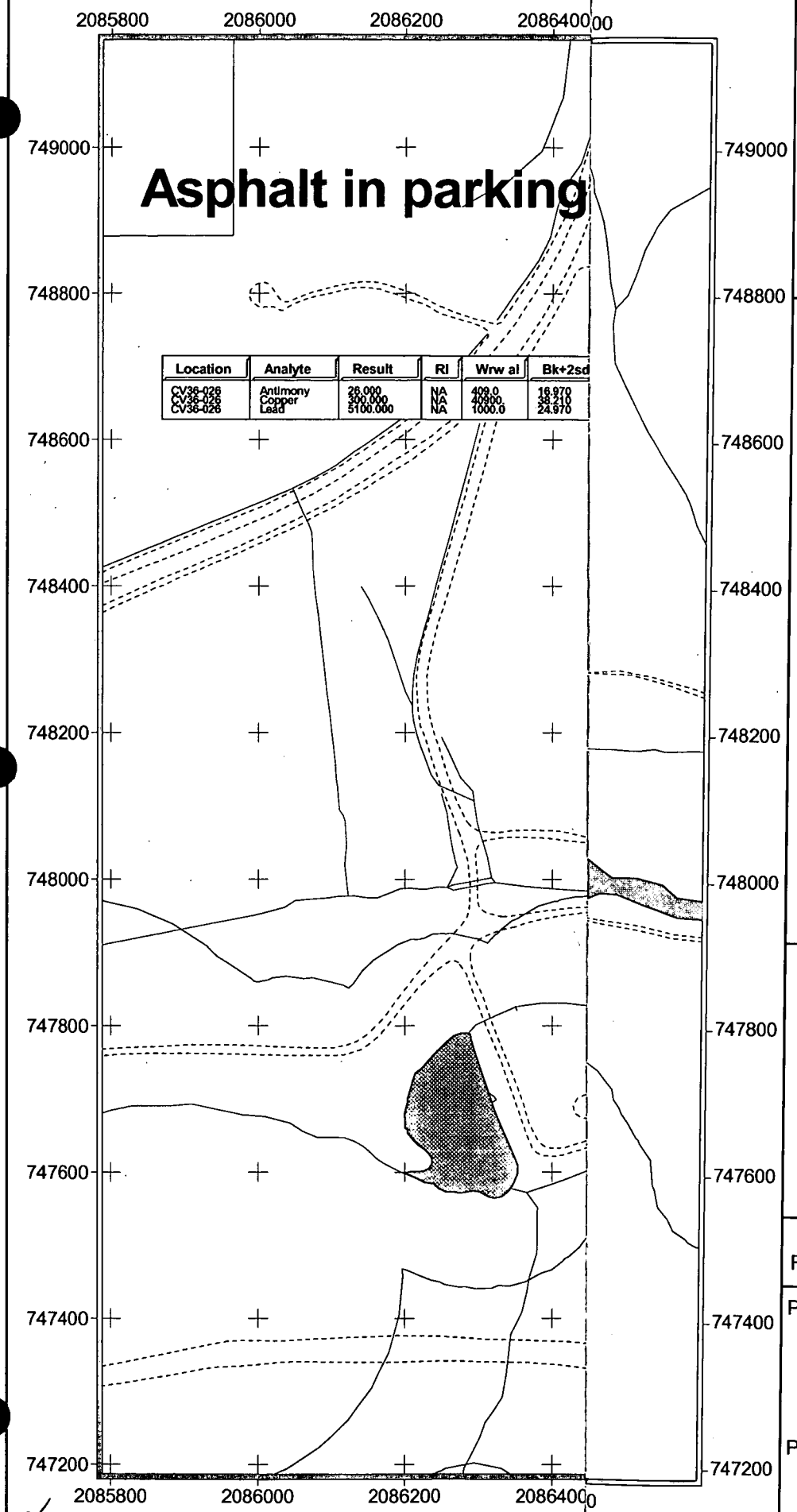
Based on characterization results (Section 2.2), soil removal and subsequent confirmation sampling were necessary. Soil removal activities are summarized in Section 3.1. Confirmation sampling was required to demonstrate that all residual contaminant concentrations in soil are below the WRW ALs or are acceptable based on the RAOs and Subsurface Soil Risk Screen (SSRS). Sampling and analysis was conducted in accordance with the IABZSAP (DOE 2004d). Specifications for confirmation sampling are presented in Table 2 and included in the summary statistics (Tables 4 and 5). Confirmation results are presented in Table 11 and shown on Figure 8.

Only results greater than background means plus two standard deviations or RLs are shown on Figure 11. Residual-confirmation sample WRW AL exceedances exist for arsenic in the berm and STA areas. All other exceedances were remediated and therefore, none are indicated in Table 11 or shown on Figure 8. Figures 9, 10, 11, and 11 show the residual concentrations for metals that are above background means plus two standard deviations or RLs. All project data, retrieved from SWD on December 16, 2004 are provided on the enclosed CD.

74

FIGURE 7

IHSS Group 900-11
PAC SE-1602
Excavation Boundaries and In-Process Sample Results Greater Than Background Means Plus Two Standard Deviations or Reporting Limits



Location	Analyte	Result	RI	Wrw al	Bk+2sd
CV36-026	Antimony	26.000	NA	409.0	16.970
CV36-026	Copper	300.000	NA	40900.	38.210
CV36-026	Lead	5100.000	NA	1000.0	24.970

KEY

- In-process sampling location
- Excavation boundary
- PAC SE-1602 East Firing Range
- Preble's Meadow Jumping Mouse habitat
- Paved road
- Dirt road
- Pond
- Stream

DRAFT

N W E S

50 0 50 100 150 200 250 300 350 Feet

Scale = 1:2500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared for: KAISER•HILL COMPANY

Prepared by: RADMS

File: W/Projects/Fy2005/903 Lip Area Closeout /Firing_Range/firing_range.apr

Date: 12/13/04

Table 10
IHSS Group 900-11, PAC SE-1602 East Firing Range In-Process Soil Characterization Results

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Plus 2 Standard Deviations	Units	Start Depth (ft)	End Depth (ft)
CV36-026	2087118.597	748610.775	Antimony	26.000	NA	409	16.970	mg/kg	0	3
CV36-026	2087118.597	748610.775	Copper	300.000	NA	40900	38.210	mg/kg	0	3
CV36-026	**2087118.597**	**748610.775**	**Lead**	**5100.000**	NA	**1000**	**24.970**	**mg/kg**	**0**	**3**
CW36-002	2087144.500	748620.174	Copper	49.000	NA	40900	38.210	mg/kg	0	3
CW36-002	**2087144.500**	**748620.174**	**Lead**	**2000.000**	NA	**1000**	**24.970**	**mg/kg**	**0**	**3**
CW37-020	**2087263.006**	**748876.129**	**Lead**	**1200.000**	NA	**1000**	**24.970**	**mg/kg**	**2**	**2.5**
CX31-078	2087505.043	747680.799	Antimony	12.000	NA	409	0.470	mg/kg	0	0.5
CX31-078	**2087505.043**	**747680.799**	**Arsenic**	**39.800**	NA	**22.2**	**10.090**	**mg/kg**	**0**	**0.5**
CX31-078	2087505.043	747680.799	Barium	878.000	NA	26400	141.260	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Chromium	40.800	NA	268	16.990	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Copper	47.000	NA	40900	18.060	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Iron	30000.000	NA	307000	18037.000	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Lead	275.000	NA	1000	54.620	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Manganese	438.000	NA	3480	365.080	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Nickel	38.600	NA	20400	14.910	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Selenium	1.340	NA	5110	1.224	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Strontium	166.000	NA	613000	48.940	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Vanadium	104.000	NA	7150	45.590	mg/kg	0	0.5
CX31-078	2087505.043	747680.799	Zinc	87.500	NA	307000	73.760	mg/kg	0	0.5
CX32-006	**2087436.888**	**747764.829**	**Arsenic**	**43.900**	NA	**22.2**	**10.090**	**mg/kg**	**0**	**0.5**
CX32-006	2087436.888	747764.829	Barium	848.000	NA	26400	141.260	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Chromium	43.900	NA	268	16.990	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Copper	74.100	NA	40900	18.060	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Iron	33100.000	NA	307000	18037.000	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Lead	315.000	NA	1000	54.620	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Manganese	439.000	NA	3480	365.080	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Nickel	43.500	NA	20400	14.910	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Selenium	1.890	NA	5110	1.224	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Strontium	182.000	NA	613000	48.940	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Tin	7.000	NA	613000	2.900	mg/kg	0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Plus 2 Standard Deviations	Units	Start Depth (ft)	End Depth (ft)
CX32-006	2087436.888	747764.829	Vanadium	126.000	NA	7150	45.590	mg/kg	0	0.5
CX32-006	2087436.888	747764.829	Zinc	103.000	NA	307000	73.760	mg/kg	0	0.5

Bold font denotes AL exceedance
NA = not applicable
mg/kg = milligrams per kilogram
ft = foot

Table 11
IHSS Group 900-11, PAC SE-1602 East Firing Range Confirmation Sampling Data

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CV36-025	2087112.307	748626.837	Lead	460.000	NA	1000.000	24.970	mg/kg	0.0	3.0
CV36-028	2087140.743	748629.847	Barium	510.000	NA	26400.000	289.380	mg/kg	3.0	3.5
CV36-028	2087140.743	748629.847	Lead	29.000	NA	1000.000	24.970	mg/kg	3.0	3.5
CV36-030	2087120.118	748602.691	Aluminum	25000.000	NA	228000.000	16902.000	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Antimony	0.960	NA	409.000	0.470	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Barium	240.000	NA	26400.000	141.260	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Beryllium	1.200	NA	921.000	0.966	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Cobalt	11.000	NA	1550.000	10.910	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Copper	24.000	NA	40900.000	18.060	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Iron	24000.000	NA	307000.000	18037.000	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Lead	110.000	NA	1000.000	54.620	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Lithium	20.000	NA	20400.000	11.550	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Manganese	680.000	NA	3480.000	365.080	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	3.0
CV36-030	2087120.118	748602.691	Vanadium	50.000	NA	7150.000	45.590	mg/kg	0.0	3.0
CW36-001	2087154.143	748634.674	Copper	49.000	NA	40900.000	38.210	mg/kg	0.0	3.0

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW36-001	2087154.143	748634.674	Lead	150.000	NA	1000.000	24.970	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Aluminum	32000.000	NA	228000.000	16902.000	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Antimony	0.550	NA	409.000	0.470	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Beryllium	1.400	NA	921.000	0.966	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Chromium	30.000	NA	268.000	16.990	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Iron	28000.000	NA	307000.000	18037.000	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Lead	64.000	NA	1000.000	54.620	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Lithium	25.000	NA	20400.000	11.550	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Manganese	450.000	NA	3480.000	365.080	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Nickel	21.000	NA	20400.000	14.910	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Strontium	53.000	NA	613000.000	48.940	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Tin	3.100	NA	613000.000	2.900	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Vanadium	56.000	NA	7150.000	45.590	mg/kg	0.0	3.0
CW36-003	2087144.657	748613.376	Zinc	80.000	NA	307000.000	73.760	mg/kg	0.0	3.0
CW37-016	2087260.641	748901.093	Cadmium	2.200	NA	962.000	1.612	mg/kg	0.0	0.5
CW37-016	2087260.641	748901.093	Nickel	15.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-016	2087260.641	748901.093	Strontium	84.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-017	2087231.722	748887.896	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-017	2087231.722	748887.896	Cobalt	24.000	NA	1550.000	10.910	mg/kg	0.0	0.5
CW37-017	2087231.722	748887.896	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CW37-017	2087231.722	748887.896	Nickel	26.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-017	2087231.722	748887.896	Strontium	140.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Barium	200.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW37-018	2087246.797	748878.777	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-018	2087246.797	748878.777	Strontium	66.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Aluminum	19000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Barium	290.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Beryllium	1.000	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Cadmium	3.600	NA	962.000	1.612	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Chromium	18.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Strontium	110.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-019	2087286.322	748890.231	Zinc	79.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CW37-021	2087245.889	748865.686	Aluminum	22000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-021	2087245.889	748865.686	Barium	150.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-021	2087245.889	748865.686	Beryllium	1.400	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-021	2087245.889	748865.686	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-021	2087245.889	748865.686	Lithium	16.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-021	2087245.889	748865.686	Strontium	66.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Aluminum	17000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Barium	190.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Lead	84.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Lithium	13.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Nickel	16.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-022	2087278.881	748852.637	Strontium	86.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Aluminum	21000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Barium	180.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-023	2087262.052	748843.848	Strontium	80.000	NA	613000.000	48.940	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW37-025	2087283.723	748808.789	Aluminum	19000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Antimony	2.100	NA	409.000	0.470	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Barium	210.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Copper	20.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Lead	280.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Lithium	15.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Strontium	77.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-025	2087283.723	748808.789	Tin	3.500	NA	613000.000	2.900	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Aluminum	19000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Copper	21.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Lead	69.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Nickel	22.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-026	2087295.241	748800.681	Strontium	79.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Aluminum	20000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Barium	220.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Chromium	21.000	NA	268.000	16.990	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Copper	19.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Lithium	17.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Nickel	19.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-027	2087281.781	748797.655	Strontium	78.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Barium	842.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Chromium	43.500	NA	268.000	16.990	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CW37-028	2087262.961	748876.119	Iron	30200.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Nickel	36.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Strontium	198.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Tin	6.630	NA	613000.000	2.900	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Vanadium	96.900	NA	7150.000	45.590	mg/kg	0.0	0.5
CW37-028	2087262.961	748876.119	Zinc	91.200	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-060	2087390.224	747669.689	Lead	36.000	NA	1000.000	24.970	mg/kg	1.0	1.2
CX31-065	2087398.278	747724.436	Aluminum	37000.000	NA	228000.000	35373.170	mg/kg	1.1	1.3
CX31-065	2087398.278	747724.436	Arsenic	15.000	NA	22.200	13.140	mg/kg	1.1	1.3
CX31-066	2087386.499	747754.003	Lead	32.000	NA	1000.000	24.970	mg/kg	1.0	1.2
CX31-067	2087441.760	747689.981	Lead	25.000	NA	1000.000	24.970	mg/kg	0.8	1.0
CX31-077	**2087493.139**	**747709.944**	**Arsenic**	**32.300**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CX31-077	2087493.139	747709.944	Barium	807.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Chromium	60.700	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Copper	44.400	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Iron	31800.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Lead	183.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Manganese	514.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Nickel	40.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Strontium	172.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Tin	10.300	NA	613000.000	2.900	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Vanadium	108.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-077	2087493.139	747709.944	Zinc	100.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-079	**2087530.958**	**747729.973**	**Arsenic**	**31.600**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CX31-079	2087530.958	747729.973	Barium	856.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Chromium	58.600	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Copper	47.600	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Iron	31800.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Lead	59.400	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Manganese	406.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Nickel	39.200	NA	20400.000	14.910	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-079	2087530.958	747729.973	Strontium	161.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Vanadium	100.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-079	2087530.958	747729.973	Zinc	98.400	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-083	2087505.043	747680.799	Barium	892.000	NA	26400.000	289.380	mg/kg	2.0	2.5
CX31-083	2087505.043	747680.799	Vanadium	116.000	NA	7150.000	88.490	mg/kg	2.0	2.5
CX31-084*	2087490.836	747725.063	Arsenic	11.100	NA	22.200	10.090	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Barium	617.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Chromium	67.800	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Copper	34.300	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Iron	33300.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Manganese	432.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Nickel	42.500	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Strontium	135.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Vanadium	122.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-084*	2087490.836	747725.063	Zinc	100.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Arsenic	14.600	NA	22.200	10.090	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Barium	634.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Chromium	69.100	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Copper	33.900	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Iron	36200.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Manganese	457.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Nickel	45.500	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Strontium	166.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Vanadium	127.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-085*	2087528.841	747738.568	Zinc	107.000	NA	307000.000	73.760	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Antimony	14.700	NA	409.000	0.470	mg/kg	0.0	0.5
CX31-086*	**2087505.267**	**747671.366**	**Arsenic**	**53.200**	**NA**	**22.200**	**10.090**	**mg/kg**	**0.0**	**0.5**
CX31-086*	2087505.267	747671.366	Barium	595.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Chromium	52.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Copper	55.100	NA	40900.000	18.060	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Iron	32300.000	NA	307000.000	18037.000	mg/kg	0.0	0.5

Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX31-086*	2087505.267	747671.366	Lead	692.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Manganese	437.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Nickel	40.900	NA	20400.000	14.910	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Strontium	154.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Vanadium	105.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX31-086*	2087505.267	747671.366	Zinc	95.500	NA	307000.000	73.760	mg/kg	0.0	0.5
CX32-003	2087373.199	747774.677	Aluminum	18000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX32-003	2087373.199	747774.677	Antimony	0.570	NA	409.000	0.470	mg/kg	0.0	0.5
CX32-003	2087373.199	747774.677	Chromium	19.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX32-003	2087373.199	747774.677	Lead	94.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX32-003	2087373.199	747774.677	Lithium	14.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Aluminum	26000.000	NA	228000.000	16902.000	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Antimony	0.490	NA	409.000	0.470	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Barium	170.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Beryllium	1.100	NA	921.000	0.966	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Chromium	25.000	NA	268.000	16.990	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Copper	22.000	NA	40900.000	18.060	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Iron	21000.000	NA	307000.000	18037.000	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Lead	120.000	NA	1000.000	54.620	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Lithium	19.000	NA	20400.000	11.550	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Nickel	18.000	NA	20400.000	14.910	mg/kg	0.0	0.5
CX32-004	2087405.028	747769.831	Vanadium	54.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX32-008	2087436.711	747764.930	Arsenic	14.300	NA	22.200	13.140	mg/kg	2.0	2.5
CX32-008	2087436.711	747764.930	Barium	899.000	NA	26400.000	289.380	mg/kg	2.0	2.5
CX32-008	2087436.711	747764.930	Strontium	222.000	NA	613000.000	211.380	mg/kg	2.0	2.5
CX32-008	2087436.711	747764.930	Vanadium	115.000	NA	7150.000	88.490	mg/kg	2.0	2.5
CX32-009*	2087435.910	747775.486	Arsenic	21.800	NA	22.200	10.090	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Barium	622.000	NA	26400.000	141.260	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Chromium	43.600	NA	268.000	16.990	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Copper	38.400	NA	40900.000	18.060	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Iron	29700.000	NA	307000.000	18037.000	mg/kg	0.0	0.5

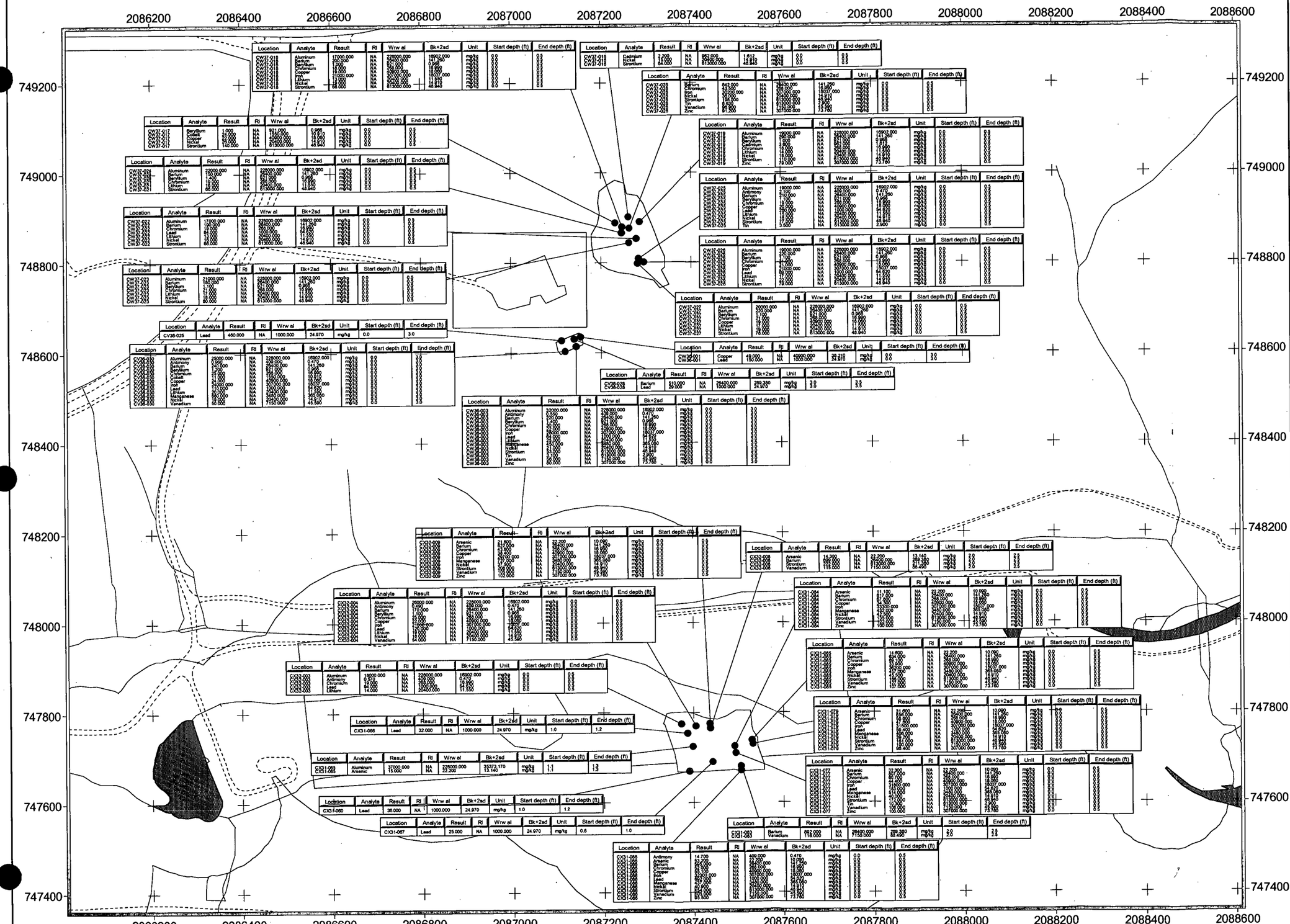
Location	Actual Easting	Actual Northing	Analyte	Result	RL	WRW AL	Background Mean Plus 2 Standard Deviations	Unit	Start Depth (ft)	End Depth (ft)
CX32-009*	2087435.910	747775.486	Manganese	727.000	NA	3480.000	365.080	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Nickel	37.500	NA	20400.000	14.910	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Strontium	208.000	NA	613000.000	48.940	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Vanadium	105.000	NA	7150.000	45.590	mg/kg	0.0	0.5
CX32-009*	2087435.910	747775.486	Zinc	102.000	NA	307000.000	73.760	mg/kg	0.0	0.5

* New location with SW-846 6200 data, SW-846 6010 data pending.

RL = Reporting Limit
NA = Not applicable
mg/kg = milligram per kilogram
ft = foot

Bold font denotes AL exceedance

FIGURE 8
IHSS Group 900-11
PAC SE-1602
East Firing Range
Confirmation Sampling
Results Greater Than
Background Means Plus
Two Standard Deviations
or Reporting Limits



KEY

- Confirmation Sampling Location
- PAC SE-1602 East Firing Range
- Excavation Area
- Preble's Meadow Jumping Mouse habitat
- Paved Area
- Dirt Road
- Pond
- Stream

DRAFT

N
W E
S

50 0 50 100 150 200 250 300 350 Feet

Scale = 1:2500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared for: KAISER•HILL COMPANY

Prepared by: RADMS

Date: 12/16/04

File: W/Projects/Fy2005/903 Lip Area Closeout /Firing_Range/Fig8_update_121604.apr

85

Only results greater than background means plus two standard deviations or RLs are shown on Figure 11. Residual-confirmation sample WRW AL exceedances exist for arsenic in the berm and STA areas. All other exceedances were remediated and therefore, none are indicated in Table 11 or shown on Figure 8. Figures 9, 10, and 11 show the residual concentrations for metals that are above background means plus two standard deviations or RLs. All project data, retrieved from SWD on December 16, 2004 are provided on the enclosed CD.

Reported results for confirmation sampling locations CX31-084, CX31-085, CX31-086, CX32-009 in Table 11 are from XRF (EPA method 6200) data. The XRF results are considered preliminary results and will be superceded by EPA method 6010, mass spectroscopy data. Data from East Firing Range paired 6010/6200 analyses indicate that the 6200 (XRF) data is higher than the 6010 data by at least 50% (range of 57% -85%). While some of the 6200 analyses are reported at concentrations greater than WRW ALs, it is anticipated that the 6010 analyses will indicate concentrations less than WRW ALs.

On Figure 2 of BZSAP Addendum #BZ-04-11 two historic sampling locations, PT048 and PT049, were shown. Plutonium -239/240 at each location was above the WRW AL. Upon further investigation it was determined that these samples represent composites from areas ranging from 2.5 to 10 acres and that therefore they may not be representative of actual soil conditions at those specific locations. Because sample analyses were for radionuclides any remediation for these locations has been discussed in the Draft Closeout Report IHSS Group 900-11 IHSS 900-155, 903 Lip Area IHSS 900-140, Hazardous Disposal Area (DOE 2004c). These locations will not be discussed further in this document.

Similarly one sampling location (PT057) south of the STA, contained a lead concentration in surface soil above the ecological receptor AL was shown on Figure 2 in BZSAP Addendum #BZ04-11. This sample was also based on a 2.5 or more acre composite and will not be addressed further.

5.0 POST-REMEDIATION CONDITIONS

At least 300 cy of clean fill was brought to the site from the Building 371 site and distributed. The fill was rough graded. In the berm area grading was performed to eliminate steep slopes. In the other excavation areas grading mimicked existing slopes. Seed for replanting has been ordered and will be distributed when it arrives. The regraded areas were covered with coconut fiber mats and straw waddles have been installed in small downgradient drainages to limit erosion.

6.0 SUBSURFACE SOIL RISK SCREEN

The Subsurface Soil Risk Screen (SSRS) follows the steps identified in Figure 3 of Attachment 5 of RFCA (DOE et al. 2003). Ecological effects will be further evaluated in the AAESE and ecological risk assessment portion of the Sitewide CRA.

Screen 1 – Are the COC concentrations below RFCA Modifications Table 3 soil ALs for the WRW?

THIS TARGET SHEET REPRESENTS AN
OVER-SIZED MAP / PLATE FOR THIS DOCUMENT:
(Ref: 04-RF-01288; KLW-057-04)

Draft Closeout Report for IHSS Group 900-11 PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 9:

IHSS Group 900-11 PAC SE-1602 East Firing Range South Central Region Residual Contamination

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range_jb_copy.apr

December 20, 2004

CERCLA Administrative Record Document, BZ-A-000776

U.S. DEPARTEMENT OF ENERGY
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

GOLDEN, COLORADO

87

THIS TARGET SHEET REPRESENTS AN
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(Ref: 04-RF-01288; KLW-057-04)

Draft Closeout Report for IHSS Group 900-11 PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 10:

IHSS Group 900-11 PAC SE-1602 East Firing Range Outer South Region Residual Contamination

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range_jb_copy.apr

December 20, 2004

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88

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(Ref: 04-RF-01288; KLW-057-04)

Draft Closeout Report for IHSS Group 900-11 PAC SE-1602 East Firing Range and Target Area

December 2004

Figure 11:

IHSS Group 900-11 PAC SE-1602 East Firing Range North Region Residual Contamination

File: W:\Projects\Fy2005\903 Lip Area Closeout\Firing_Range\firing_range_jb_copy.apr

December 20, 2004

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89

Yes. As shown in Tables 1 and 11 and on figures 9, 10, 11, and 12 all residual subsurface soil concentrations for metals are less than RFCA WRW ALs. Accelerated action characterization (and in some cases confirmation) locations that had exceedances have been remediated.

Screen 4 – Is there an environmental pathway and sufficient quantity of COCs that would cause an exceedance of the surface water standards?

Yes. Migration via erosion and groundwater are two possible pathways whereby surface water could become contaminated by the East Firing Range. Surface water monitoring for metals from the East Firing Range occurs at GS01 where Woman Creek exits the Site to the east at Indiana Street. Surface water concentrations for the principal COCs derived from bullets (lead, arsenic, and antimony) from upgradient (monitoring locations GS05 and GS06) to downgradient (GS01) Woman Creek indicate that upgradient concentrations are greater than downgradient (DOE 2003a). Remediation of the East Firing Range will further eliminate a source and only lower metal concentrations entering Woman Creek drainage.

Approximately 0.56 acres were disturbed during this accelerated action. Based on actinide monitoring of the 903 Pad and 903 Inner and Outer Lip projects it is assumed that remediation of the East Firing Range will result in an increased sediment load to surface water even with erosion control. However, because potential source areas for metals (and actinides in the berm and trench areas) have been removed and the excavated areas have been revegetated, it is anticipated that both sediment load and metal concentrations will be reduced at the monitoring locations downgradient from the East Firing Range as the soil disturbed by the remedial action is stabilized by the new vegetation.

Groundwater metal contamination in the area of the East Firing Range does not appear to be a problem as indicated by the fact that monitoring for metals in the area has been terminated in the area. Potential groundwater contamination for volatile organic compounds along the extreme western edge of the East Firing Range area is considered to be part of the 903 Pad Plume, which commingles with both the East Trenches and Ryan's Pit Plumes (DOE 2003b). Groundwater contamination will be evaluated as part of the Groundwater IM/IRA and future Sitewide evaluations.

7.0 STEWARDSHIP ANALYSIS

This stewardship evaluation is documented in the following sections. The regulatory agencies were informed of project activities and characterization results through frequent project updates, e-mails, telephone contacts, and personal contact throughout the project duration. The stewardship evaluation was conducted through ongoing consultation with the regulatory agencies. Copies of these documents are provided in Appendix A.

7.1 Current Site Conditions

As discussed in Section 3.1, accelerated actions at the East Firing Range consisted of removing contaminated soil and asphalt from the parking area in the NTA. Soil containing lead in concentrations greater than 220 mg/kg and/or arsenic greater than 35 mg/kg was removed. Soil from the berm was removed to a depth of 2 ft bgs, at

90

confirmation location CW37-028 an additional 2 ft was removed. In the trench area soil to a depth of 3 ft bgs was removed. In the STA soil to a depth of 0.5 ft bgs was removed, and additional 0.5 ft of soil was removed at confirmation locations CX32-008 and CX31-083. Residual metal concentrations that are greater than background means plus two standard deviations remain at the East Firing Range (Figures 9, 10, 11, and 12).

The action for the East Firing Range included excavation and offsite disposal of metal contaminated soil and asphalt. The following tasks were completed:

- Excavated a total of 0.56 acres in the berm, trench, and STA areas of the East Firing Range;
- Removed 520 cy (12/7/04) of soil for disposal;
- Filled 10 IP-1 boxes with soil for disposal;
- Filled 160 DRT bags with soil for disposal; and
- Collected confirmation samples in accordance with the BZSAP (DOE 2002), 903 IM/IRA (DOE 2004b), and consultative process (Regulatory Contact Records dated 11/2/04 and 11/15/04; Appendix A).

Excavated areas were backfilled with clean soil, graded, reseeded, and covered with coconut matting to prevent erosion. The berm was graded to eliminate steep slopes. The trench area near the NTA and the slope in the STA were graded to match the existing natural slope. Residual surface and subsurface contaminant concentrations in soil within the excavation boundaries are below WRW ALs except in the case of arsenic.

The residual arsenic concentrations greater than WRW ALs are acceptable based on the agreements reached in Contact Records dated 11/2/04 and 11/15/04 (Appendix A).

7.2 Near-Term Management Recommendations

No specific, near-term management techniques are required. Contaminant concentrations in soil remaining at the East Firing Range do not trigger any further accelerated action based on RFCA. Other near-term recommendations include the following:

- Erosion controls will be maintained;
- Access will be restricted to minimize disturbance to newly revegetated areas;
- Site access and security controls and the Soil Disturbance Permit process will remain in place pending implementation of long-term controls; and
- Groundwater and surface water monitoring will continue as part of the Integrated Monitoring Program.

7.3 Long-Term Management Recommendations

Based on remaining environmental conditions at the East Firing Range, long-term stewardship activities are recommended beyond the generally applicable Site requirements. These requirements may be imposed on this area in the future. Institutional controls that will be used as appropriate for this area include the following:

91

- Prohibitions on construction of buildings in the BZ;
- Restrictions on excavation or other soil disturbance; and
- Prohibitions on groundwater pumping in the area of the East Firing Range.

No specific engineered controls or environmental monitoring are recommended as a result of the conditions remaining at the East Firing Range. Likewise, no specific institutional or physical controls, such as fences, are recommended as a result of the conditions remaining at the East Firing Range.

This Closeout Report and associated documentation will be retained as part of the Rocky Flats Administrative Record (AR) file. The specific long-term stewardship recommendations will also be summarized in the Rocky Flats Long-Term Stewardship Strategy.

The East Firing Range will be evaluated as part of the Sitewide CRA, which is part of the RCRA Remedial Investigation/Feasibility Study (RI/FS) that will be conducted for the Site. The need for and extent of any more general, long-term stewardship activities will also be evaluated in the RI/FS and will be proposed as part of the preferred alternative in the Proposed Plan for the Site. Institutional controls and other long-term stewardship requirements for Rocky Flats will be contained in the Corrective Action Decision/Record of Decision, any post-closure Colorado Hazardous Waste Act permit that may be required, and any post-RFCA agreement.

7.4 Accelerated Action Stewardship

Stewardship actions that were implemented during the accelerated action included performing air monitoring, surface water monitoring, groundwater monitoring, and posting signs and barriers.

8.0 DEVIATIONS FROM THE 903 IM/IRA

Removal methods and objectives did not deviate from the 903 IM/IRA (DOE 2004b) and subsequent consultative process modifications documented in Regulatory Contact Records (see Appendix A).

9.0 RCRA UNIT CLOSURE

Not applicable. There were no Resource Conservation and Recovery Act (RCRA) units to be closed. The East Firing Range was not a storage, treatment, or disposal area.

10.0 WASTE MANAGEMENT

Waste from the East Firing Range accelerated action consisted of loose soil. The excavated soil was sampled and classified as either as low-level radioactive waste (LLW) or low-level mixed waste (LLM). Details of the current (12/1/04) disposition of the waste are given in Table 12.

92

Table 12
IHSS Group 900-11, PAC SE-1602 East Firing Range Waste Volumes and Analytical Results

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
B09188	090306491	IP-1 Box	27	3850	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09189	90306492	IP-1 Box	34	4690	LLM	11/15/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09199	090306493	IP-1 Box	33	4620	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09204	90306494	IP-1 Box	30	4270	LLM	11/16/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09206	090306495	IP-1 Box	33	4670	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09429	90306496	IP-1 Box	21	3150	LLM	11/15/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09432	90306497	IP-1 Box	36	4920	LLM	11/15/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09472	90306498	IP-1 Box	37	5090	LLM	11/16/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09480	90306499	IP-1 Box	36	4940	LLM	11/16/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
B09492	90306500	IP-1 Box	26	3760	LLM	11/15/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09493	90306501	IP-1 Box	36	4930	LLM	11/15/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09494	090306502	IP-1 Box	26	3830	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09496	90306504	IP-1 Box	46	6130	LLM	11/30/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09497	90306505	IP-1 Box	34	4750	LLM	11/30/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09498	90306506	IP-1 Box	29	4110	LLM	11/15/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
B09499	90306507	IP-1 Box	34	4700	LLM	11/16/04	FILLED	Soil	374	D008	Ship to Waste Control Specialists, Texas, for treatment prior to disposal
L08334	90306508	DRT Bag	113	13620	LLW	11/15/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08335	90306509	DRT Bag	151	18170	LLW	11/15/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08336	90306510	DRT Bag	153	18390	LLW	11/15/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08337	90306511	DRT Bag	155	18630	LLW	11/15/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08338	90306512	DRT Bag	150	18080	LLW	11/15/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08339	90306513	DRT Bag	141	17020	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08340	90306514	DRT Bag	154	18560	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08341	90306515	DRT Bag	128	15410	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08342	90306516	DRT Bag	131	15750	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08343	90306517	DRT Bag	147	17720	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08344	90306518	DRT Bag	145	17510	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08345	90306519	DRT Bag	138	16580	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08346	90306520	DRT Bag	124	14970	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08347	90306521	DRT Bag	151	18200	LLW	11/16/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08348	90306522	DRT Bag	172	20750	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08349	90306523	DRT Bag	173	20780	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08350	90306524	DRT Bag	171	20580	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08351	90306525	DRT Bag	111	13430	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08352	90306526	DRT Bag	156	18820	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08353	90306527	DRT Bag	168	20290	LLM	11/17/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08354	90306528	DRT Bag	122	14720	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08355	90306529	DRT Bag	173	20820	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08356	90306530	DRT Bag	165	19930	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08357	90306531	DRT Bag	168	20190	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08358	90306532	DRT Bag	168	20290	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08389	90306533	DRT Bag	174	20960	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08390	90306534	DRT Bag	162	19570	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08391	90306535	DRT Bag	159	19200	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08392	90306536	DRT Bag	171	20540	LLW	11/17/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08394	90306538	DRT Bag	167	20090	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08396	90306540	DRT Bag	148	17850	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08397	90306541	DRT Bag	167	20150	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08398	90306542	DRT Bag	170	20440	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08399	90306543	DRT Bag	175	21050	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08400	90306544	DRT Bag	164	19760	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08401	90306545	DRT Bag	164	19760	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08402	90306546	DRT Bag	167	20060	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08403	90306547	DRT Bag	157	18900	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08404	90306548	DRT Bag	166	19970	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08405	90306549	DRT Bag	169	20390	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08406	90306550	DRT Bag	172	20740	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08407	90306551	DRT Bag	170	20500	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08408	90306552	DRT Bag	175	21080	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08409	90306553	DRT Bag	166	20030	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08410	90306554	DRT Bag	167	20100	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08411	90306555	DRT Bag	166	19960	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08412	90306556	DRT Bag	113	13660	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08413	90306557	DRT Bag	120	14490	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08414	90306558	DRT Bag	167	20080	LLW	11/19/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08415	90306559	DRT Bag	165	19840	LLW	11/19/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08416	90306560	DRT Bag	166	19940	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08417	90306561	DRT Bag	161	19410	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08418	90306562	DRT Bag	156	18840	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08434	90306563	DRT Bag	173	20830	LLM	11/19/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08435	90306564	DRT Bag	162	19570	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08436	90306565	DRT Bag	152	18300	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08437	90306566	DRT Bag	152	18340	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08438	90306567	DRT Bag	153	18440	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08439	90306568	DRT Bag	155	18730	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08440	90306569	DRT Bag	152	18280	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08441	90306570	DRT Bag	148	17790	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08442	90306571	DRT Bag	159	19100	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08443	90306572	DRT Bag	155	18620	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08444	90306573	DRT Bag	165	19820	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08445	90306574	DRT Bag	151	18230	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08446	90306575	DRT Bag	131	15820	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08447	90306576	DRT Bag	137	16550	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08448	90306577	DRT Bag	162	19520	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08449	90306578	DRT Bag	159	19110	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08450	90306579	DRT Bag	171	20630	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08451	90306580	DRT Bag	165	19870	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08452	90306581	DRT Bag	160	19230	LLM	11/22/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08453	90306582	DRT Bag	155	18620	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08454	90306583	DRT Bag	164	19750	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08455	90306584	DRT Bag	173	20800	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08456	90306585	DRT Bag	169	20310	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08457	90306586	DRT Bag	157	18910	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08458	90306587	DRT Bag	162	19570	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08459	90306588	DRT Bag	144	17360	LLW	11/22/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08460	90306589	DRT Bag	165	19860	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08461	90306590	DRT Bag	162	19500	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08462	90306591	DRT Bag	165	19920	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08463	90306592	DRT Bag	156	18810	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08464	90306593	DRT Bag	132	15860	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08465	90306594	DRT Bag	163	19620	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08466	90306595	DRT Bag	169	20300	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08467	90306596	DRT Bag	161	19420	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08468	90306597	DRT Bag	170	20480	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08469	90306598	DRT Bag	154	18500	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08470	90306599	DRT Bag	154	18570	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08471	90306600	DRT Bag	156	18770	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08472	90306601	DRT Bag	157	18900	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08473	90306602	DRT Bag	155	18690	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08474	90306603	DRT Bag	147	17660	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08476	90306605	DRT Bag	159	19210	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08477	90306606	DRT Bag	152	18320	LLM	11/23/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08478	90306607	DRT Bag	163	19580	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08479	90306608	DRT Bag	173	20890	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08480	90306609	DRT Bag	159	19130	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08481	90306610	DRT Bag	169	20370	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08482	90306611	DRT Bag	156	18790	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08483	90306612	DRT Bag	162	19510	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08484	90306613	DRT Bag	163	19680	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08485	90306614	DRT Bag	156	18680	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08486	90306615	DRT Bag	136	16360	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08487	90306616	DRT Bag	165	19840	LLM	11/23/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08488	90306617	DRT Bag	163	19600	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08489	90306618	DRT Bag	156	18760	LLW	11/23/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08490	90306619	DRT Bag	158	19080	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08491	90306620	DRT Bag	165	19870	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08492	90306621	DRT Bag	128	15440	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08493	90306622	DRT Bag	162	19470	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08494	90306623	DRT Bag	157	18950	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08495	90306624	DRT Bag	125	15050	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08496	90306625	DRT Bag	161	19390	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08497	90306626	DRT Bag	166	19970	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08498	90306627	DRT Bag	158	19090	LLM	11/24/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08499	90306628	DRT Bag	163	19690	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08500	90306629	DRT Bag	162	19470	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08501	90306630	DRT Bag	169	20360	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08502	90306631	DRT Bag	142	17060	LLM	11/24/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08503	90306632	DRT Bag	149	17960	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08504	90306633	DRT Bag	156	18810	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08505	90306634	DRT Bag	158	18990	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08506	90306635	DRT Bag	131	15840	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08507	90306636	DRT Bag	168	20180	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08508	90306637	DRT Bag	161	19440	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08509	90306638	DRT Bag	155	18620	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08510	90306639	DRT Bag	166	20030	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08511	90306640	DRT Bag	150	18060	LLM	11/24/04	FILLED	Soil	374	D008	Ship to Envirocare of Utah for treatment and/or disposal
L08512	90306664	DRT Bag	169	20390	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08513	90306641	DRT Bag	165	19890	LLW	11/24/04	FILLED	Soil	374	NA	Ship to Envirocare of Utah for treatment and/or disposal
L08514	90306642	DRT Bag	128	15480		11/30/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08515	90306643	DRT Bag	137	16510		11/30/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08516	90306644	DRT Bag	139	16750		12/01/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08517	90306645	DRT Bag	139	16730		12/01/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08972	90306646	DRT Bag	139	16770		12/01/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08973	90306647	DRT Bag	144	17390		12/01/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08974	90306648	DRT Bag	137	16480		12/01/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08975	90306649	DRT Bag	141	16960		12/01/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L08976	90306650	DRT Bag	149	17920		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08977	90306651	DRT Bag	153	18420		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08978	90306652	DRT Bag	150	18040		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08979	90306653	DRT Bag	154	18600		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08980	90306654	DRT Bag	145	17460		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08981	90306655	DRT Bag	163	19690		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08982	90306656	DRT Bag	145	17480		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08983	90306657	DRT Bag	150	18040		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08984	90306658	DRT Bag	155	18660		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08985	90306659	DRT Bag	152	18340		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08986	90306660	DRT Bag	142	17140		12/07/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08987	90306661	DRT Bag	155	18630		12/08/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08988	90306662	DRT Bag	149	17980		12/08/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L08989	90306663	DRT Bag	144	17350		12/08/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L09054	90306665	DRT Bag	144	17340		12/08/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal

Container Number	Extended Number	Container Type	Volume (cu ft)	Gross Weight (lbs)	Type of Waste	Date Filled	Status	Waste Description	IDC	Waste Codes	Disposition
L09055	90306666	DRT Bag	166	19970		12/08/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal
L09056	90306667	DRT Bag	163	19650		12/08/04	FILLED	Soil	374		Ship to Envirocare of Utah for treatment and/or disposal

IP-1 Box = 4x4x7 ft metal waste box (generic)
DRT Bag = dirt, rubble, and trash bag
LLW = low-level radioactive waste LLM = low-level mixed waste
cu ft = cubic feet
lbs = pounds
IDC = (Material Control and Accountability) Item Description Code, Code 374 = blacktop, concrete, dirt, & sand
D008 = waste code for material that exceeds Resource Conservation and Recovery Act (RCRA) characteristic of toxicity for lead
NA = not applicable.

11.0 SITE RECLAMATION

Approximately 300 cubic yards of clean backfill soil from the Building 371 area was brought to the project site and spread over the berm, trench area, and excavated areas in the STA. The areas were subsequently rough-graded. Coconut matting and straw waddles have been distributed to limit erosion. Mesic seed has been ordered for reseeding and will be distributed when they are received.

12.0 NO LONGER REPRESENTATIVE SAMPLING LOCATIONS

Because of the accelerated action remediation activities, primarily the removal of contaminated soil, a combination of historical, characterization, and confirmation sampling locations are no longer representative (NLR). These locations are listed in Table 13.

Table 13
IHSS Group 900-11, PAC SE-1602 East Firing Range NLR Locations

Location Code	Northing	Easting	Area	Primary Type
CV36-020	748612.013	2087118.450	Trench	Characterization
CV36-021	748620.555	2087138.181	Trench	Characterization
CV36-026	748610.775	2087118.597	Trench	Confirmation
CV37-009	748800.740	2087295.330	Berm	Characterization
CV37-013	748890.202	2087286.286	Berm	Characterization
CV37-018	748797.604	2087281.782	Berm	Characterization
CV37-019	748808.676	2087283.705	Berm	Characterization
CV37-020	748826.802	2087274.829	Berm	Characterization
CV37-021	748852.710	2087278.828	Berm	Characterization
CV37-022	748876.130	2087262.885	Berm	Characterization
CV37-023	748901.122	2087260.610	Berm	Characterization
CW32-000	747769.507	2087345.815	South	Characterization
CW36-002	748620.174	2087144.500	Trench	Confirmation
CW37-001	748810.334	2087261.790	Berm	Other 900-11 Group
CW37-003	748875.524	2087289.383	Berm	Other 900-11 Group
CW37-004	748856.720	2087242.951	Berm	Other 900-11 Group
CW37-011	748901.887	2087243.335	Berm	Characterization
CW37-012	748887.888	2087231.763	Berm	Characterization
CW37-013	748878.720	2087246.759	Berm	Characterization
CW37-014	748865.692	2087245.962	Berm	Characterization
CW37-015	748843.817	2087261.968	Berm	Characterization
CW37-020	748876.129	2087263.006	Berm	Confirmation
CX31-031	747741.347	2087354.533	South	Characterization
CX31-032	747712.674	2087363.282	South	Characterization
CX31-033	747676.243	2087373.646	South	Characterization
CX31-036	747761.337	2087371.453	South	Characterization
CX31-037	747736.947	2087379.683	South	Characterization
CX31-038	747710.469	2087387.942	South	Characterization

106

Location Code	Northing	Easting	Area	Primary Type
CX31-039	747676.132	2087398.854	South	Characterization
CX31-041	747756.677	2087396.352	South	Characterization
CX31-042	747734.856	2087403.205	South	Characterization
CX31-043	747710.886	2087412.286	South	Characterization
CX31-044	747678.385	2087422.640	South	Characterization
CX31-046	747754.825	2087419.210	South	Characterization
CX31-047	747734.031	2087427.007	South	Characterization
CX31-051	747752.611	2087442.699	South	Characterization
CX31-052	747733.051	2087450.044	South	Characterization
CX31-053	747710.531	2087459.121	South	Characterization
CX31-054	747679.243	2087471.278	South	Characterization
CX31-057	747712.668	2087530.340	South	Characterization
CX31-058	747704.370	2087449.075	South	Characterization
CX31-059	747697.873	2087426.110	South	Characterization
CX31-074	747710.065	2087493.116	South	Characterization
CX31-075	747680.782	2087505.102	South	Characterization
CX31-076	747730.017	2087530.962	South	Characterization
CX31-078	747681.081	2087504.893	South	Confirmation
CX32-005	747764.884	2087436.982	South	Confirmation
CX32-006			South	Confirmation
CY31-008	747685.862	2087542.459	South	Characterization
FOV0930	748876.950	2087227.363	Berm	Historical
FOV0932	748843.711	2087238.684	Berm	Historical
FOV0944	748887.954	2087295.718	Berm	Historical

13.0 DATA QUALITY ASSESSMENT

13.1 Data Quality Assessment Process

The data quality objectives (DQOs) for this project are described in the BZSAP (DOE 2002). All DQOs for this project were achieved based on the following:

- Regulatory agency-approved sampling program design: BZSAP Addendum #IA-04-11 (DOE 2004a);
- Samples collected in accordance with the BZSAP (DOE 2002) and IABZSAP (2004d); and
- Data Quality Assessment (DQA) conducted as documented in the following sections.

The DQA process ensures that the type, quantity, and quality of environmental data used in decision making are defensible, and is based on the following guidance and requirements:

- U.S. Environmental Protection Agency (EPA), 1994a, Guidance for the Data Quality Objective Process, QA/G-4;

- EPA, 1998, Guidance for the Data Quality Assessment Process; Practical Methods for Data Analysis, QA/G-9; and
- U.S. Department of Energy (DOE), 1999, Quality Assurance, Order 414.1A.

Verification and validation (V&V) of the data are the primary components of the DQA. The final data are compared with original project DQOs and evaluated with respect to project decisions; uncertainty within the decisions; and quality criteria required for the data, specifically precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS). Validation criteria are consistent with the following RFETS-specific documents and industry guidelines:

- EPA, 1994b, U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, 540/R-94/012;
- EPA, 1994c, U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, 540/R-94/013;
- Kaiser-Hill Company, L.L.C. (K-H) V&V Guidelines:
  - General Guidelines for Data Verification and Validation, DA-GR01-v2, 2002a
  - V&V Guidelines for Isotopic Determinations by Alpha Spectrometry, DA-RC01-v2, 2002b
  - V&V Guidelines for Volatile Organics, DA-SS01-v3, 2002c
  - V&V Guidelines for Semivolatile Organics, DA-SS02-v3, 2002d
  - V&V Guidelines for Metals, DA-SS05-v3, 2002e; and
- Lockheed-Martin, 1997, Evaluation of Radiochemical Data Usability, ES/ER/MS-5.

This report will be submitted to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Record (AR) for permanent storage 30 days after being provided to CDPHE and/or EPA.

13.2 Verification and Validation of Results

Verification ensures that data produced and used by the project are documented and traceable in accordance with quality requirements. Validation consists of a technical review of all data that directly support the project decisions so that any limitations of the data relative to project goals are delineated and the associated data are qualified accordingly. The V&V process defines the criteria that constitute data quality, namely PARCCS parameters (precision, accuracy, representativeness, completeness, comparability, and sensitivity). Data traceability and archival are also addressed. V&V criteria include the following:

- Chain-of-custody;
- Preservation and hold times;
- Instrument calibrations;
- Preparation blanks;
- Interference check samples (metals);

108

- Matrix spikes/matrix spike duplicates (MS/MSDs);
- Laboratory control samples (LCSs);
- Field duplicate measurements;
- Chemical yield (radiochemistry);
- Required quantitation limits/minimum detectable activities (sensitivity of chemical and radiochemical measurements, respectively); and
- Sample analysis and preparation methods.

Evaluation of V&V criteria ensures that PARCCS parameters are satisfactory (that is, within tolerances acceptable to the project). Satisfactory V&V of laboratory quality controls are captured through application of validation "flags" or qualifiers to individual records.

Raw, hard-copy data (for example, individual analytical data packages) are currently filed by report identification number (RIN) and maintained by K-H Analytical Services Division (ASD); older hard copies may reside in the Federal Center in Lakewood, Colorado. Electronic data are stored in the RFETS Soil Water Database (SWD). The data sets addressed in this report are included on the enclosed compact disc in Microsoft Access 2000 format.

13.2.1 Accuracy

The following measures of accuracy were evaluated:

- LCSs;
- Surrogates:
- Field blanks; and
- Sample MSs.

Results are compared to method requirements and project goals. The results of these comparisons are summarized for RFCA COCs where the result could impact project decisions. Particular attention is paid to those values near ALs when QC results could indicate unacceptable levels of uncertainty for decision-making purposes.

Laboratory Control Sample Evaluation

The frequency of LCS measurements is presented in Table 14. As indicated in Table 14 LCS analyses were run for Alpha Spectrometry and SW-846 6010 and not for SW-846 6200. When the In-Situ Counting System (ISOCS) technique is used for gamma spectroscopy, or XRF is used for metals, an internal standard approach is used instead of LCSs. The onsite laboratory that performs gamma spectroscopy and XRF are therefore not required to provide LCS data.

Minimum and maximum LCS results are tabulated by chemical for the entire project in Table 15. LCS results that were outside of tolerances were reviewed to determine whether a potential bias might be indicated. LCS recoveries are not indicative of matrix effects because they are not prepared using Site samples. LCS results do indicate

whether the laboratory may be introducing a bias in the results. Recoveries reported above the upper limit may indicate the actual sample results are less than reported. Because this is environmentally conservative, no further action is needed.

Potentially unacceptable low LCS recoveries were evaluated in the following manner. If the maximum sample result divided by the lowest LCS recovery for that analyte is less than the WRW AL, no further action is taken because any indicated bias is not great enough affect project decisions. Except for copper and lead (analyzed by method SW-846 6010), all metal LCS recoveries for the East Firing Range passed the criterion. Both copper and lead had WRW AL exceedances and recoveries did not impact project decisions because these locations were remediated.

Any qualifications of individual results because of LCS performance exceeding upper or lower tolerance limits are also captured in the V&V flags, described in Section 6.2.3.

Table 14
LCS Summary

Test Method	Laboratory Batch	Laboratory Control Standards
ALPHA SPEC	360848	Yes
ALPHA SPEC	360860	Yes
ALPHA SPEC	363834	Yes
SW-846 6010	4174238	Yes
SW-846 6010	4174241	Yes
SW-846 6010	4174302	Yes
SW-846 6010	4174303	Yes
SW-846 6010	4176245	Yes
SW-846 6010	4176376	Yes
SW-846 6010	4210685	Yes
SW-846 6010	4210686	Yes
SW-846 6010	4210687	Yes
SW-846 6010	4213081	Yes
SW-846 6010	4215253	Yes
SW-846 6010	4216584	Yes
SW-846 6010	4217179	Yes
SW-846 6010	4217533	Yes
SW-846 6010	4220056	Yes
SW-846 6010	4220057	Yes
SW-846 6010	4220111	Yes
SW-846 6010	4220112	Yes
SW-846 6010	4220115	Yes
SW-846 6010	4220116	Yes
SW-846 6010	4223484	Yes
SW-846 6010	4229121	Yes
SW-846 6010	4229123	Yes

Test Method	Laboratory Batch	Laboratory Control Standards
SW-846 6010	4239621	Yes
SW-846 6010	4243165	Yes
SW-846 6010	4253594	Yes
SW-846 6010	4257377	Yes
SW-846 6010	4258134	Yes
SW-846 6010	4258566	Yes
SW-846 6010	4259583	Yes
SW-846 6010	4264486	Yes
SW-846 6010	4321553	Yes
SW-846 6010	4322143	Yes
SW-846 6010	4324400	Yes
SW-846 6010	4324469	Yes
SW-846 6010	4327559	Yes
SW-846 6010	4328406	Yes
SW-846 6010	4328630	Yes
SW-846 6010	4328631	Yes
SW-846 6010	4329319	Yes
SW-846 6010	4329320	Yes

Table 15
LCS Evaluation Summary

Test Method	CAS	Analyte	Minimum Result	Maximum Result	Unit
SW-846 6010	7429-90-5	Aluminum	90	105	%REC
SW-846 6010	7440-36-0	Antimony	86	97	%REC
SW-846 6010	7440-38-2	Arsenic	83	96	%REC
SW-846 6010	7440-39-3	Barium	91	105	%REC
SW-846 6010	7440-41-7	Beryllium	85	102	%REC
SW-846 6010	7440-43-9	Cadmium	85	101	%REC
SW-846 6010	7440-47-3	Chromium	87	103	%REC
SW-846 6010	7440-48-4	Cobalt	84	98	%REC
SW-846 6010	7440-50-8	Copper	90	105	%REC
SW-846 6010	7439-89-6	Iron	92	108	%REC
SW-846 6010	7439-92-1	Lead	86	101	%REC
SW-846 6010	7439-93-2	Lithium	87	101	%REC
SW-846 6010	7439-96-5	Manganese	84	102	%REC
SW-846 6010	7439-97-6	Mercury	93	108	%REC
SW-846 6010	7439-98-7	Molybdenum	87	99	%REC
SW-846 6010	7440-02-0	Nickel	86	101	%REC
SW-846 6010	7782-49-2	Selenium	85	97	%REC

Test Method	CAS	Analyte	Minimum Result	Maximum Result	Unit
SW-846 6010	7440-22-4	Silver	88	104	%REC
SW-846 6010	7440-24-6	Strontium	90	103	%REC
SW-846 6010	7440-31-5	Tin	82	93	%REC
SW-846 6010	11-09-6	Uranium, Total	93	102	%REC
SW-846 6010	7440-62-2	Vanadium	88	101	%REC
SW-846 6010	7440-66-6	Zinc	83	99	%REC

Surrogate Evaluation

Surrogates were not evaluated during this project because only metals and radionuclides are reported.

Field Blank Evaluation

Results of the field blank analyses are provided in Table 16. Detectable (non-"U" laboratory qualified) amounts of contaminants within the blanks, which could indicate possible cross-contamination of samples, are evaluated if the same contaminant is detected in the associated real samples. Evaluation consists of multiplying the field blank results by 10 (for laboratory contaminants) or by 5 (for non-laboratory contaminants) and comparing them to the WRW ALs. To be conservative a factor of 10 is used in this evaluation. When the corrected field blank result is less than the WRW AL the associated real results are considered acceptable. In the East Firing Range data none of the field blank results multiplied by 10 exceeded their WRW ALs. Therefore, blank contamination did not adversely impact project decisions.

Table 16
Field Blank Summary

Sample QC Code	Laboratory	Analyte	Detected Result	Unit	CAS
FB	ESTLDEN	Aluminum	120	mg/kg	7429-90-5
FB	ESTLDEN	Barium	0.77	mg/kg	7440-39-3
FB	ESTLDEN	Chromium	0.42	mg/kg	7440-47-3
FB	ESTLDEN	Copper	0.33	mg/kg	7440-50-8
FB	ESTLDEN	Iron	90	mg/kg	7439-89-6
FB	ESTLDEN	Lead	0.34	mg/kg	7439-92-1
FB	ESTLDEN	Manganese	2.4	mg/kg	7439-96-5
FB	ESTLDEN	Nickel	0.25	mg/kg	7440-02-0
FB	ESTLDEN	Strontium	1.2	mg/kg	7440-24-6
FB	ESTLDEN	Tin	1	mg/kg	7440-31-5

Sample Matrix Spike Evaluation

Table 17 provides a summary of the minimum and maximum MS results by chemical for the project. For inorganics with MS recoveries greater than zero, the MS recovery is checked by dividing the maximum sample result by the lowest percent recovery for each analyte. If the resulting number was less than the WRW AL, decisions were not impacted. For this project, for the SW-846 6010 method only, antimony and arsenic failed the criterion. Project decisions were not affected because the location with antimony was remediated. Arsenic records were reviewed to determine if project decisions could be impacted. The data indicate that at location CX31-065 the recoveries were acceptable.

Aluminum, copper, iron, lead, and manganese had minimum percent recoveries of zero.

Results for aluminum, copper, iron, and manganese were less than 20 percent of their ALs, and do not affect project decisions. All lead results greater than 20 percent of the WRW (1000 mg/kg) were remediated except for one location, CV36-025 (460 mg/kg). Matrix spike recoveries did not impact project decisions.

Table 17
Sample MS Evaluation Summary

Test Method	CAS	Analyte	Minimum Result	Maximum Result	Unit	Number of MS Samples	Number of Laboratory Batches
SW-846 6010	7429-90-5	Aluminum	0	9570	%REC	13	13
SW-846 6010	7440-36-0	Antimony	30	72	%REC	13	13
SW-846 6010	7440-38-2	Arsenic	64	96	%REC	13	13
SW-846 6010	7440-39-3	Barium	48	177	%REC	13	13
SW-846 6010	7440-41-7	Beryllium	68	108	%REC	13	13
SW-846 6010	7440-43-9	Cadmium	52	98	%REC	13	13
SW-846 6010	7440-47-3	Chromium	47	152	%REC	13	13
SW-846 6010	7440-48-4	Cobalt	61	104	%REC	13	13
SW-846 6010	7440-50-8	Copper	0	112	%REC	13	13
SW-846 6010	7439-89-6	Iron	0	10100	%REC	13	13
SW-846 6010	7439-92-1	Lead	0	237	%REC	13	13
SW-846 6010	7439-93-2	Lithium	67	108	%REC	13	13
SW-846 6010	7439-96-5	Manganese	0	1160	%REC	13	13
SW-846 6010	7439-97-6	Mercury	85	110	%REC	14	14
SW-846 6010	7439-98-7	Molybdenum	66	94	%REC	13	13
SW-846 6010	7440-02-0	Nickel	58	102	%REC	13	13
SW-846 6010	7782-49-2	Selenium	67	97	%REC	13	13
SW-846 6010	7440-22-4	Silver	70	101	%REC	13	13
SW-846 6010	7440-24-6	Strontium	58	106	%REC	13	13
SW-846 6010	7440-31-5	Tin	62	89	%REC	13	13
SW-846 6010	11-09-6	Uranium, Total	69	102	%REC	13	13
SW-846 6010	7440-62-2	Vanadium	56	157	%REC	13	13
SW-846 6010	7440-66-6	Zinc	30	149	%REC	13	13

113

13.2.2 Precision

Matrix Spike Duplicate Evaluation

Laboratory precision is measured through use of MSDs, as summarized in Table 18. Analytes with the highest relative percent differences (RPDs) were reviewed by comparing the highest sample result to the AL. If the highest samples were sufficiently below the AL, no further action is needed. For this project, the analytes with the highest RPD were copper, iron, manganese, and zinc. These metals, were detected at concentrations well below (several orders of magnitude) their WRW ALs therefore project decisions were not affected by MSD results with high RPDs.

Table 18
Sample MSD Evaluation Summary

Test Method Name	CAS	Analyte	Maximum RPD (%)
SW-846 6010	7429-90-5	Aluminum	28.571
SW-846 6010	7440-36-0	Antimony	37.838
SW-846 6010	7440-38-2	Arsenic	24.658
SW-846 6010	7440-39-3	Barium	53.435
SW-846 6010	7440-41-7	Beryllium	27.848
SW-846 6010	7440-43-9	Cadmium	26.207
SW-846 6010	7440-47-3	Chromium	64.748
SW-846 6010	7440-48-4	Cobalt	28.169
SW-846 6010	7440-50-8	Copper	145.455
SW-846 6010	7439-89-6	Iron	126.821
SW-846 6010	7439-92-1	Lead	54.676
SW-846 6010	7439-93-2	Lithium	29.299
SW-846 6010	7439-96-5	Manganese	184.106
SW-846 6010	7439-97-6	Mercury	16.585
SW-846 6010	7439-98-7	Molybdenum	21.622
SW-846 6010	7440-02-0	Nickel	31.884
SW-846 6010	7782-49-2	Selenium	21.333
SW-846 6010	7440-22-4	Silver	22.785
SW-846 6010	7440-24-6	Strontium	34.286
SW-846 6010	7440-31-5	Tin	35.762
SW-846 6010	11-09-6	Uranium, Total	23.077
SW-846 6010	7440-62-2	Vanadium	50.667
SW-846 6010	7440-66-6	Zinc	81.188

114

Field Duplicate Evaluation

Field duplicate results reflect sampling precision, or overall repeatability of the sampling process. The frequency of field duplicate collection should exceed 1 field duplicate per 20 real samples, or 5 percent. This goal is applied to the overall ER project and not on a specific IHSS Group basis. Table 19 indicates duplicate sampling frequencies were greater than 5 percent for both SW-846-6010 and SW-846-6200 methods. Only one alpha spectroscopy sample was collected in the East Firing Range and there were no associated duplicates.

Table 19
Field Duplicate Sample Frequency Summary

Test Method Name	Real	Duplicate	% Duplicate Samples
ALPHA SPEC	1	0	0.00%
SW-846 6010	159	17	10.69%
SW-846 6200	75	6	8.00%

The RPDs indicate how much variation exists in the field duplicate analyses. The EPA data validation guidelines state that "there are no required review criteria for field duplicate analyses comparability." For the DQA, the highest RPDs were reviewed. The highest sample concentrations for those analytes were corrected for the associated RPD (Table 20), and the resulting numbers were compared to the ALs. Many of the metals listed had high maximum RPDs. Because this is likely due to soil heterogeneity, project decisions were not impacted.

Table 20
RPD Evaluation Summary

Lab Code	Test Method	Analyte	Maximum RPD (%)
ESTLDEN	SW-846 6010	Aluminum	198.406
ESTLDEN	SW-846 6010	Antimony	19.355
ESTLDEN	SW-846 6010	Arsenic	77.778
ESTLDEN	SW-846 6010	Barium	37.838
ESTLDEN	SW-846 6010	Beryllium	16.749
ESTLDEN	SW-846 6010	Cadmium	12.766
ESTLDEN	SW-846 6010	Chromium	16.393
ESTLDEN	SW-846 6010	Cobalt	50.000
ESTLDEN	SW-846 6010	Copper	193.812
ESTLDEN	SW-846 6010	Iron	198.565
ESTLDEN	SW-846 6010	Lead	197.150
ESTLDEN	SW-846 6010	Lithium	53.731
ESTLDEN	SW-846 6010	Manganese	197.878
ESTLDEN	SW-846 6010	Mercury	122.981

115

Lab Code	Test Method	Analyte	Maximum RPD (%)
ESTLDEN	SW-846 6010	Nickel	16.216
ESTLDEN	SW-846 6010	Strontium	187.755
ESTLDEN	SW-846 6010	Vanadium	21.538
ESTLDEN	SW-846 6010	Zinc	53.061
URS	SW-846 6200	Barium	7.924
URS	SW-846 6200	Cobalt	9.537
URS	SW-846 6200	Copper	108.547
URS	SW-846 6200	Iron	7.860
URS	SW-846 6200	Lead	21.530
URS	SW-846 6200	Manganese	9.524
URS	SW-846 6200	Nickel	11.864
URS	SW-846 6200	Selenium	200.000
URS	SW-846 6200	Strontium	4.762
URS	SW-846 6200	Vanadium	11.268

13.2.3 Completeness

Based on original project DQOs, a minimum of 25 percent of ER Program analytical (and radiological) results must be formally verified and validated. Of that percentage, no more than 10 percent of the results may be rejected, which ensures that analytical laboratory practices are consistent with quality requirements. These goals are applied to the overall ER project and not on a specific IHSS Group basis. Table 21 presents the number and percentage of validated records (codes without "1"), the number and percentage of verified records (codes with "1"), and the percentage of rejected records for each analytical method.

Thirty-six SW-846-6200 records were rejected, likely because of out of tolerance MS and RPDs. The percentage of validated records is low at the East Firing Range. However, this project is part of the larger IHSS Group 900-11 Lip Area project where validation percentages are acceptable.

Table 21
V&V Summary

Validation Qualifier Code	Total of CAS Number	Alpha Spectroscopy	SW-846 6010	SW-846 6200
No V&V	344	0	230	114
1	2	0	2	0
J	86	0	86	0
J1	674	0	560	114
R1	36	0	0	36
UJ	15	0	15	0

116

Validation Qualifier Code	Total of CAS Number	Alpha Spectroscopy	SW-846 6010	SW-846 6200
UJ1	312	0	160	152
V	129	0	129	0
V1	3489	5	2475	1009
Total	5087	5	3657	1425
Validated	230	0	230	0
% Validated	4.52%	0.00%	6.29%	0.00%
Verified	4513	5	3197	1311
% Verified	88.72%	100.00%	87.42%	92.00%
Rejected	36	0	0	36
% Rejected	0.71%	0.00%	0.00%	2.53%

13.2.4 Sensitivity

RLs, in units of micrograms per kilogram (µg/kg) for organics, milligrams per kilogram (mg/kg) for metals, and MDAs in picocuries per gram (pCi/g) for radionuclides, were compared with RFCA WRW ALs. Adequate sensitivities of analytical methods were attained for all COCs that affect project decisions. "Adequate" sensitivity is defined as an RL less than an analyte's associated AL, typically less than one-half the AL.

13.3 Summary of Data Quality

Several QC criteria were exceeded for East Firing Range results, however most of these locations were remediated. Data validation is low, but because this project is part of the IHSS Group 900-11 project which has acceptable validation percentages, data is adequate.

14.0 PROJECT CONCLUSIONS

Results of the accelerated action justify an NFAA determination for IHSS Group 900-11, PAC SE-1602 the East Firing Range. This justification is based on the following:

- Soil with arsenic, antimony, copper, or lead concentrations greater than WRW ALs was removed.
- All remaining contaminant concentrations are less than WRW ALs.
- Asphalt from the parking area was removed.
- No accelerated action is required based on the SSRS.
- No accelerated action is required based on the stewardship evaluation.

15.0 REFERENCES

DOE, 1992-2003, Historical Release Reports for the Rocky Flats Plant, Golden, Colorado.

DOE, 2002, Final Buffer Zone Sampling and Analysis Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, June.

DOE, 2003a, Final Automated Surface-Water Monitoring Report: Water Year 2002, Rocky Flats Environmental Technology Site, Golden, Colorado, November (RF/EMM/WP-03-SWMANLRPT02.UN).

DOE, 2003b, Rocky Flats Environmental Technology Site Integrated Monitoring Plan FY2004, Revision 2, Background Document, Rocky Flats Environmental Technology Site, Golden, Colorado, March.

DOE, 2004a, Buffer Zone Sampling and Analysis Plan FY04 Addendum #BZ-04-11 IHSS Group 900-11, PAC SE-1602 (East Firing Range), Rocky Flats Environmental Technology Site, Golden, Colorado, January.

DOE, 2004b, Final Interim Measure / Interim Remedial Action For IHSS Group 900-11 (903 Lip Area And Vicinity, The Windblown Area, and Surface Soil in Operable Unit 1 [881 Hillside]) Rocky Flats Environmental Technology Site, Golden, Colorado, August 25.

DOE, 2004c, DRAFT Closeout Report IHSS Group 900-11 IHSS 900-155, 903 Lip Area IHSS 900-140, Hazardous Disposal Area, Rocky Flats Environmental Technology Site, Golden, Colorado, December.

DOE, 2004d, Industrial Area and Buffer Zone Sampling and Analysis Plan Modification 1, Rocky Flats Environmental Technology Site, Golden, Colorado, May.

DOE, CDPHE, and EPA, 2003, Modifications to the Rocky Flats Cleanup Agreement Attachment 5, U.S. Department of Energy, Colorado Department of Public Health and Environment, and U.S. Environmental Protection Agency, Rocky Flats Environmental Technology Site, Golden, Colorado, June.

EPA, 1994a, Guidance for the Data Quality Objective Process, QA/G-4.

EPA, 1994b, U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, 540/R-94/012.

EPA, 1994c, U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, 540/R-94/013.

EPA, 1998, Guidance for the Data Quality Assessment Process, Practical Methods for Data Analysis, QA/G-9.

ITRC, 2003, Technical / Regulatory Guidelines: Characterization and Remediation of Soils at Closed Small Arms Firing Ranges, Interstate Technology and Regulatory Council, January.

K-H. 2002a, General Guidelines for Data Verification and Validation, DA-GR01-v2, October.

118

K-H, 2002b, V&V Guidelines for Isotopic Determinations by Alpha Spectrometry, DA-RC01-v2., October.

K-H, 2002c, V&V Guidelines for Volatile Organics, DA-SS01-v3, October.

K-H, 2002d, V&V Guidelines for Semivolatile Organics, DA-SS02-v3, October.

K-H, 2002e, V&V Guidelines for Metals, DA-SS05-v3, October.

Lockheed-Martin, 1997, Evaluation of Radiochemical Data Usability, ES/ER/MS-5.

119

APPENDICES

Appendix A – Correspondence

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY REGULATORY CONTACT RECORD

Date/Time: May 13, 2004 / 10:30 a.m.

Site Contact(s): DOE: Norma Castaneda
K-H: Lee Norland, Annette Primrose
K-H Team: Susan Serreze

Phone: 303/966-5223

Regulatory Contact: See Attendees below
Phone: 303/692-2035-CDPHE
303/312-6246-EPA
303/966-4226-DOE

Agency: CDPHE: Dave Kruchek, Carl Spreng, Harlen Ainscough
EPA: Gary Kleeman
DOE: Norma Castaneda

Purpose of Contact: Comment Resolution Meeting For Draft IHSS Group 500-5 Data Summary Report, Draft IHSS Group 900-12 ER RSOP Notification, East Firing Range Sampling, and the Sanitary Sewer Strategy.

Discussion
See meeting minutes below

Regulatory Contact Record Prepared By: Susan Serreze

I. Attendees

CDPHE: Harlen Ainscough, Dave Kruchek, Carl Spreng
EPA: Gary Kleeman
DOE: Norma Castaneda
K-H: Lee Norland, Annette Primrose
K-H Team: Susan Serreze

II. Report Status

No reports were distributed.

121

III. Issues

No sitewide issues were discussed.

Specific Comments

15.1.1 Draft IHSS Group 500-5 Data Summary Report

The following resolutions were agreed to:

1. In Section 2.1 the reference to "fluid" will be changed to indicate what kind of fluid.
2. A smear sample result was reported in ug/L. The result units will be checked.
3. All Regulatory Contact Records and e-mails regarding sampling location repositioning will be included in an appendix.
4. CDPHE agrees with the Best Management Practice for removal of the slab and additional stained soil because the previous exceedance was at the surface.
5. All references to the "normalized data" on the CD will be changed to "standardized".

15.1.2 Draft ER RSOP Notification for IHSS Group 900-12

The following resolutions were agreed to:

1. The map showing characterization data will be changed to include plutonium.
2. The history of the trenches and potential relationship to 903 Pad will be researched. This additional information will be added to the notification.
3. A confirmation sample will be collected in the eastern portion of Trench 9-A, located as close as possible to a previously collected trench material characterization sample. The confirmation sample will target soil from 0 to 2.5 feet.

East Firing Range Sampling
The following resolutions were agreed to:

1. The onsite XRF will be used for analyses instead of a hand-held XRF.
2. A geoprobe will be used where allowed by the Biological Evaluation; otherwise a hand auger will be used to collect samples.

Sanitary Sewer Strategy

CDPHE comments on the Sanitary Sewer Strategy were discussed and several clarifications were made. Responses to CDPHE comments will be addressed in a revised Strategy.

V. Meetings

The next meeting is scheduled for Thursday, May 27, 2004 at 10:30 AM.

122

Required Distribution:		Additional Distribution:
M. Aguilar, USEPA	R. McCallister, DOE-RFFO	H. Ainscough, CDPHE
S. Bell, DOE-RFFO	J. Mead, K-H ESS	J. Walstrom, K-H RISS
J. Berardini, K-H	S. Nesta, K-H RISS	
B. Birk, DOE-RFFO	L. Norland, K-H RISS	
L. Brooks, K-H ESS	K. North, K-H ESS	
L. Butler, K-H RISS	E. Pottorff, CDPHE	
G. Carnival, K-H RISS	A. Primrose, K-H RISS	
N. Castaneda, DOE-RFFO	R. Schassburger, DOE-RFFO	
C. Deck, K-H Legal	S. Serreze, K-H RISS	
S. Gunderson, CDPHE	D. Shelton, K-H ESS	
M. Keating, K-H RISS	C. Spreng, CDPHE	
D. Kruchek, CDPHE	S. Surovchak, DOE-RFFO	
D. Mayo, K-H RISS	K. Wiemelt, K-H RISS	
S. Garcia, USEPA	C. Zahm, K-H Legal	
	L. Kimmel, USEPA	

123

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY REGULATORY CONTACT RECORD

Date/Time:	5-13-04 / 12:30	
Site Contact(s):	Annette Primrose	Norma Castaneda
Phone:	303 966-4385	303 966-4226
Regulatory Contact:	Gary Kleeman	Harlen Ainscough
Phone:	303 312-6246	303 692-3337
Agency:	EPA	CDPHE

Purpose of Contact: Modifications to the 900-11 East Firing Range SAP

Discussion
The following changes to the BZ SAP #BZ-04-11 were agreed upon:

1) Sample collection
- Current: Collect samples to 2.5 feet using hand tools
- Revised: Collect samples using geoprobe where possible at locations outside of Preble's habitat
  - Inside Preble's habitat, collect samples to the depth possible using hand tools
    - > While every attempt will be made to collect the full 2 feet of the B interval, the actual depth will vary based on amount of rock and soil conditions and estimated maximum depth is about 1.5 feet

2) Sample Analysis
- Current: Sieve out all debris and obtain a homogenous sample, analyze using field XRF
  - Verify using lab from 5 highest, 6 from concentrations near ALs and 5 with the lowest concentrations
- Revised: Collect samples, take to URS onsite lab for sieving and analysis
  - 16 samples will be sent to the offsite lab at random

2) Schedule
- Current: Collect samples October to May
- Revised: Collect samples during Summer, with concurrence from the USF&W

Regulatory Contact Record Prepared By: Annette Primrose

Required Distribution:		Additional Distribution:
M. Aguilar, USEPA	D. Mayo, K-H RISS	Bob Koehler, K-H RISS
H. Ainscough, CDPHE	J. Mead, K-H ESS	Tom Hanson, URS
S. Bell, DOE-RFPO	S. Nesta, K-H RISS	Nan Elzinga, URS
J. Berardini, K-H	L. Norland, K-H RISS	Sherry Lopez, K-H RISS

124

B. Birk, DOE-RFPO	K. North, K-H ESS	_____
L. Brooks, K-H ESS	E. Pottorff, CDPHE	_____
L. Butler, K-H RISS	A. Primrose, K-H RISS	_____
G. Carnival, K-H RISS	R. Schassburger, DOE-RFPO	_____
N. Castaneda, DOE-RFPO	S. Serreze, K-H RISS	_____
C. Deck, K-H Legal	D. Shelton, K-H ESS	_____
N. Demos, SSOC	C. Spreng, CDPHE	_____
S. Gunderson, CDPHE	S. Surovchak, DOE-RFPO	_____
M. Keating, K-H RISS	J. Walstrom, K-H RISS	_____
G. Kleeman, USEPA	K. Wiemelt, K-H RISS	_____
D. Kruchek, CDPHE	C. Zahm, K-H Legal	_____
J. Legare, DOE-RFPO		_____

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY REGULATORY CONTACT RECORD

Date/Time:	7-13-04 / 1:00			
Site Contact(s):	Norma Castaneda, Lane Butler, Karen Wiemelt, Annette Primrose			
Phone:	303 966-4226	966-5245	966-9883	966-4385
Regulatory Contact:	Larry Kimmel,	Sam Garcia	Harlen Ainscough,	David Kruchek
Phone:	303 312-6659	303 312-6247	303 692-3337	303 692-3328
Agency:	USEPA	USEPA	CDPHE	CDPHE

Purpose of Contact: Modifications to the 900-11 East Firing Range SAP

Discussion

The following changes to the BZ SAP #BZ-04-11 were agreed upon at a meeting on July 13th.

Two additional sediment samples will be collected along Woman Creek, one at the location where the 9th from the east trajectory crosses the creek and one where the third from the east trajectory crosses the creek (trajectories as shown on Figure 3 of the SAP).

A interval samples (0 – 0.5 feet) will be collected from all of the southern sample locations. B interval samples (0.5 – 2.5 feet) will be collected from five locations within the projected area of highest bullet impacts at CX31-036, CX31-051, CX31-048, CX31-039 and CX31-050 (Figure 4 of the SAP). These five locations will be the collected first to provide an indication of impacts to soil below the A interval.

Additional B interval samples may be collected at any other sample locations if significant bullet fragments are noted while collecting the A interval. Also, if there is evidence that sediment or other recent materials cover the originally impacted surface, then the first interval will be adjusted to be collected underneath the recent material.

Regulatory Contact Record Prepared By: Annette Primrose

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE

Additional Distribution:

Bob Koehler, K-H RISS
Tom Hanson, URS
Nan Elzinga, URS
Sherry Lopez, K-H RISS
Larry Kimmel, USEPA
Sam Garcia, USEPA

S. Gunderson, CDPHE
M. Keating, K-H RISS
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

127

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY REGULATORY CONTACT RECORD

Date/Time: 11/02/04

Site Contact(s): Mike Keating
Phone: 303.966.4815

Regulatory Contact: Larry Kimmel
Phone: Harlen Ainscough

Agency: US EPA/ CDPHE

Purpose of Contact: East Firing Range

Discussion
Based on the 10/21/04 meeting (MV) and the 10/29/04 meeting (T130F) at RFETS, the following was agreed upon for the berm and "coffin" areas:

1. Action levels for arsenic will be 35 mg/kg. This decision is based on data that indicates background levels for this area are as high as 35 mg/kg (see attached data plots).
2. Remediation action level for lead is 1000 mg/kg.
3. Soil from the berm will be excavated and shipped off-site based on the above action levels. The excavation depth will be approximately 2-feet bgs. The attached map shows the approximate area that will be excavated. Confirmation samples will be collected at the current sample locations and analyzed for metals (EPA method 6010).
4. After excavation and sampling is complete, the berm will be graded to eliminate steep, vertical slopes. Erosion mat and seed will be placed on exposed areas of the berm upon completion of the remediation.
5. Soil will be excavated from a 50' x 15' area that includes the six "coffin" areas to a depth of approximately 3-feet (bgs). 1 confirmation sample will be collected in the each of the 15' sides, 2 in each of the 50' sides and 2 confirmation samples spaced evenly in the bottom. Confirmation samples will be analyzed for metals (EPA method 6010). After excavation and sampling are completed, the excavation will be back-filled with on-site soil, seeded and erosion mat will be placed on exposed areas.
6. Additional evaluations will be conducted by US Fish and Wildlife Service for the South Target Area. Results of this evaluation will be presented at the 11/04/04 document review meeting.
7. Additional evaluation of the East Firing Range area will occur as part of the Comprehensive Risk Assessment.

Regulatory Contact Record Prepared By: Mike Keating, PE, Project Manager

Required Distribution: Additional Distribution:

128

M. Aguilar, USEPA	R. McCallister, DOE-RFFO	_____
S. Bell, DOE-RFFO	J. Mead, K-H ESS	_____
J. Berardini, K-H	S. Nesta, K-H RISS	_____
B. Birk, DOE-RFFO	L. Norland, K-H RISS	_____
L. Brooks, K-H ESS	K. North, K-H ESS	_____
M. Broussard, K-H RISS	E. Pottorff, CDPHE	_____
L. Butler, K-H RISS	A. Primrose, K-H RISS	_____
G. Carnival, K-H RISS	R. Schassburger, DOE-RFFO	_____
N. Castaneda, DOE-RFFO	S. Serreze, K-H RISS	_____
C. Deck, K-H Legal	D. Shelton, K-H ESS	_____
S. Gunderson, CDPHE	C. Spreng, CDPHE	_____
M. Keating, K-H RISS	S. Surovchak, DOE-RFFO	_____
L. Kimmel, USEPA	K. Wiemelt, K-H RISS	_____
D. Kruchek, CDPHE	C. Zahm, K-H Legal	_____
D. Mayo, K-H RISS		

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY REGULATORY CONTACT RECORD

Date/Time:	11/15/04	
Site Contact(s):	Mike Keating	
Phone:	303.966.4815	
Regulatory Contact:	Larry Kimmel	Harlen Ainscough
Phone:	303-312- 6659	303-692-3337
Agency:	USEPA	CDPHE

Purpose of Contact: East Firing Range – South Target Area

Attached is a map of the East Firing Range south target area. The map shows the approximate limits of excavation to remove lead contaminated soil that exceeds Wrw action levels and probable eco risk for Prebbles Mice. Due to the location in sensitive habitat, BMP's will be implemented during excavation activities to minimize detrimental impacts including project duration.

Approximately 6-iches of soil will be excavated from the two excavation areas shown on the map and confirmation samples will be collected and analyzed for metals (6010). Confirmation samples will be located on a 32-foot sample interval based on Table 5 of the IABZ SAP (modification 1) (see attached map). Bias samples will be selectively used to confirm extent of contamination. Additional excavation will be based on the confirmation sample results Wrw action levels for lead with consideration of eco levels.

Upon completion of the excavation, the area will be backfilled with clean on-site soil, seeded, and erosion controls put in place.

Regulatory Contact Record Prepared By: Mike Keating, PE, Project Manager

Required Distribution:		Additional Distribution:
M. Aguilar, USEPA	R. McCallister, DOE-RFFO	_____
S. Bell, DOE-RFFO	J. Mead, K-H ESS	_____
J. Berardini, K-H	S. Nesta, K-H RISS	_____
B. Birk, DOE-RFFO	L. Norland, K-H RISS	_____
L. Brooks, K-H ESS	K. North, K-H ESS	_____
M. Broussard, K-H RISS	E. Pottorff, CDPHE	_____
L. Butler, K-H RISS	A. Primrose, K-H RISS	_____
G. Carnival, K-H RISS	R. Schassburger, DOE-RFFO	_____
N. Castaneda, DOE-RFFO	S. Serreze, K-H RISS	_____

C. Deck, K-H Legal
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
D. Mayo, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFFO
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

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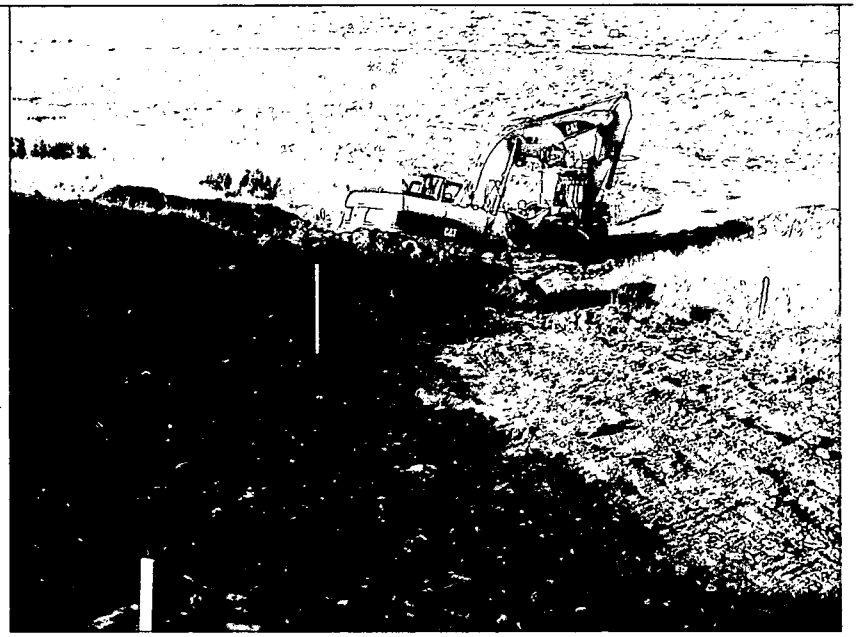
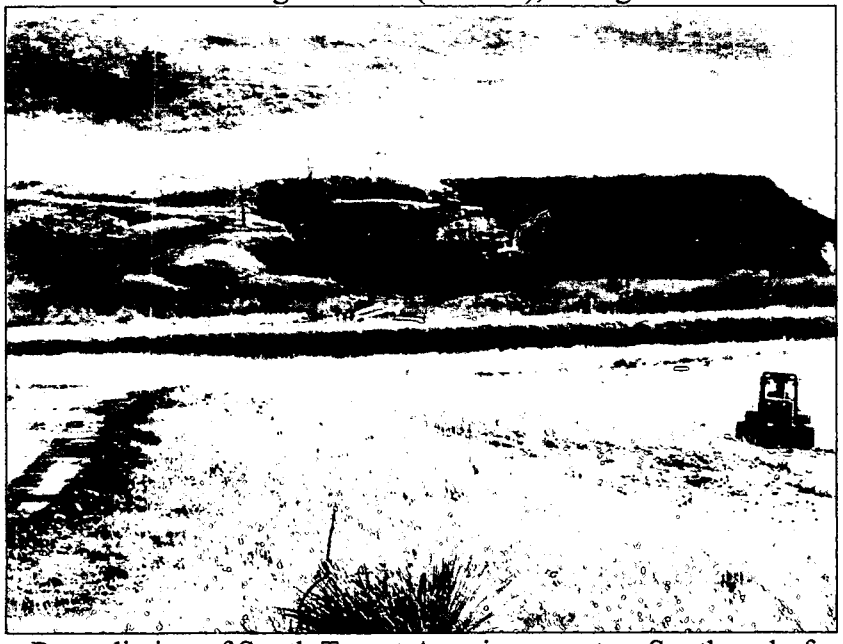
131

Appendix B - Project Photographs

Row of target frames (Row 3?), facing west.



Remediation of berm in progress, facing southeast.



Remediation of South Target Area in progress. South end of berm is in foreground. View faces south.

ENCLOSURE

Compact Disc Containing Standardized Real and Quality Control Accelerated Action Data

DISK NOT INCLUDED

134
134

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-027	0.5	2.0	Barium	704.0	mg/kg	26400.0	289.380
CV37-027	0.5	2.0	Copper	43.9	mg/kg	40900.0	38.210
CV37-027	0.5	2.0	Vanadium	107.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-028	0.5	2.0	Arsenic	31.4	mg/kg	22.2	13.140
CV37-028	0.5	2.0	Barium	775.0	mg/kg	26400.0	289.380
CV37-028	0.5	2.0	Lead	81.4	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-031	0.5	2.0	Lead	110.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-029	0.5	2.0	Barium	864.0	mg/kg	26400.0	289.380
CV37-029	0.5	2.0	Strontium	280.0	mg/kg	613000.0	211.380
CV37-029	0.5	2.0	Vanadium	102.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-030	0.5	2.0	Arsenic	25.0	mg/kg	22.2	13.140
CV37-030	0.5	2.0	Barium	3080.0	mg/kg	26400.0	289.380

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-010	0.5	2.5	Arsenic	23.0	mg/kg	22.2	13.140
CW37-010	0.5	2.5	Barium	631.0	mg/kg	26400.0	289.380
CW37-010	0.5	2.5	Strontium	107.0	mg/kg	613000.0	211.380
CW37-010	0.5	2.5	Vanadium	103.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-011	0.5	2.0	Arsenic	22.4	mg/kg	22.2	13.140
CW37-011	0.5	2.0	Barium	586.0	mg/kg	26400.0	289.380
CW37-011	0.5	2.0	Vanadium	104.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-017	0.0	0.5	Beryllium	1.0	mg/kg	921.0	0.966
CW37-017	0.0	0.5	Cobalt	24.0	mg/kg	1150.0	18.060
CW37-017	0.0	0.5	Copper	22.0	mg/kg	40900.0	18.060
CW37-017	0.0	0.5	Nickel	28.0	mg/kg	20400.0	14.910
CW37-017	0.0	0.5	Strontium	140.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-018	0.0	0.5	Aluminum	17000.0	mg/kg	228000.0	16902.000
CW37-018	0.0	0.5	Barium	200.0	mg/kg	26400.0	141.260
CW37-018	0.0	0.5	Beryllium	1.0	mg/kg	921.0	0.966
CW37-018	0.0	0.5	Chromium	18.0	mg/kg	298.0	16.990
CW37-018	0.0	0.5	Copper	19.0	mg/kg	40900.0	18.060
CW37-018	0.0	0.5	Iron	21000.0	mg/kg	307000.0	18037.000
CW37-018	0.0	0.5	Lithium	13.0	mg/kg	20400.0	11.550
CW37-018	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CW37-018	0.0	0.5	Strontium	86.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-021	0.0	0.5	Aluminum	22000.0	mg/kg	228000.0	16902.000
CW37-021	0.0	0.5	Barium	150.0	mg/kg	26400.0	141.260
CW37-021	0.0	0.5	Beryllium	1.4	mg/kg	921.0	0.966
CW37-021	0.0	0.5	Chromium	19.0	mg/kg	298.0	16.990
CW37-021	0.0	0.5	Lithium	16.0	mg/kg	20400.0	11.550
CW37-021	0.0	0.5	Strontium	66.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-022	0.0	0.5	Aluminum	17000.0	mg/kg	228000.0	16902.000
CW37-022	0.0	0.5	Barium	190.0	mg/kg	26400.0	141.260
CW37-022	0.0	0.5	Chromium	18.0	mg/kg	298.0	16.990
CW37-022	0.0	0.5	Lead	84.0	mg/kg	1000.0	54.620
CW37-022	0.0	0.5	Lithium	13.0	mg/kg	20400.0	11.550
CW37-022	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CW37-022	0.0	0.5	Strontium	86.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-023	0.0	0.5	Aluminum	21000.0	mg/kg	228000.0	16902.000
CW37-023	0.0	0.5	Barium	160.0	mg/kg	26400.0	141.260
CW37-023	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.966
CW37-023	0.0	0.5	Chromium	21.0	mg/kg	298.0	16.990
CW37-023	0.0	0.5	Lithium	17.0	mg/kg	20400.0	11.550
CW37-023	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CW37-023	0.0	0.5	Strontium	80.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-024	2.5	3.0	Aluminum	24000.0	mg/kg	228000.0	16902.000
CW37-024	2.5	3.0	Barium	190.0	mg/kg	26400.0	141.260
CW37-024	2.5	3.0	Beryllium	1.0	mg/kg	921.0	0.966
CW37-024	2.5	3.0	Chromium	28.0	mg/kg	298.0	16.990
CW37-024	2.5	3.0	Iron	21000.0	mg/kg	307000.0	18037.000
CW37-024	2.5	3.0	Lithium	24.0	mg/kg	20400.0	11.550
CW37-024	2.5	3.0	Nickel	37.0	mg/kg	20400.0	14.910
CW37-024	2.5	3.0	Strontium	53.0	mg/kg	613000.0	48.940
CW37-024	2.5	3.0	Vanadium	46.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV36-025	0.0	3.0	Lead	460.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW36-030	0.0	3.0	Aluminum	25000.0	mg/kg	228000.0	16902.000
CW36-030	0.0	3.0	Antimony	1.0	mg/kg	409.0	0.470
CW36-030	0.0	3.0	Barium	240.0	mg/kg	26400.0	141.260
CW36-030	0.0	3.0	Beryllium	1.2	mg/kg	921.0	0.966
CW36-030	0.0	3.0	Chromium	25.0	mg/kg	298.0	16.990
CW36-030	0.0	3.0	Cobalt	11.0	mg/kg	1150.0	18.060
CW36-030	0.0	3.0	Copper	21.0	mg/kg	40900.0	18.060
CW36-030	0.0	3.0	Iron	24000.0	mg/kg	307000.0	18037.000
CW36-030	0.0	3.0	Lead	110.0	mg/kg	1000.0	54.620
CW36-030	0.0	3.0	Lithium	29.0	mg/kg	20400.0	11.550
CW36-030	0.0	3.0	Manganese	686.0	mg/kg	3480.0	365.080
CW36-030	0.0	3.0	Nickel	19.0	mg/kg	20400.0	14.910
CW36-030	0.0	3.0	Vanadium	50.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV36-031	0.0	0.3	Arsenic	45.2	mg/kg	22.2	13.140
CV36-031	0.0	0.3	Barium	722.0	mg/kg	26400.0	289.380
CV36-031	0.0	0.3	Copper	91.1	mg/kg	40900.0	38.210
CV36-031	0.0	0.3	Lead	614.0	mg/kg	1000.0	24.970
CV36-031	0.0	0.3	Vanadium	105.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV36-028	3.0	3.5	Barium	510.0	mg/kg	26400.0	289.380
CV36-028	3.0	3.5	Lead	29.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW36-003	0.0	3.0	Aluminum	32000.0	mg/kg	228000.0	16902.000
CW36-003	0.0	3.0	Antimony	0.6	mg/kg	409.0	0.470
CW36-003	0.0	3.0	Barium	220.0	mg/kg	26400.0	141.260
CW36-003	0.0	3.0	Beryllium	1.4	mg/kg	921.0	0.966
CW36-003	0.0	3.0	Chromium	30.0	mg/kg	298.0	16.990
CW36-003	0.0	3.0	Copper	28.0	mg/kg	40900.0	18.060
CW36-003	0.0	3.0	Iron	59300.0	mg/kg	307000.0	18037.000
CW36-003	0.0	3.0	Lead	24.0	mg/kg	1000.0	54.620
CW36-003	0.0	3.0	Lithium	35.0	mg/kg	20400.0	11.550
CW36-003	0.0	3.0	Manganese	460.0	mg/kg	3480.0	365.080
CW36-003	0.0	3.0	Nickel	21.0	mg/kg	20400.0	14.910
CW36-003	0.0	3.0	Strontium	53.0	mg/kg	613000.0	48.940
CW36-003	0.0	3.0	Tin	3.1	mg/kg	613000.0	2.900
CW36-003	0.0	3.0	Vanadium	56.0	mg/kg	7150.0	45.590
CW36-003	0.0	3.0	Zinc	80.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW36-001	0.0	3.0	Copper	49.0	mg/kg	40900.0	38.210
CW36-001	0.0	3.0	Lead	150.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW36-004	0.0	3.0	Arsenic	26.0	mg/kg	22.2	13.140
CW36-004	0.0	3.0	Barium	720.0	mg/kg	26400.0	289.380
CW36-004	0.0	3.0	Copper	57.2	mg/kg	40900.0	38.210
CW36-004	0.0	3.0	Lead	154.0	mg/kg	1000.0	24.970
CW36-004	0.0	3.0	Vanadium	117.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-026	0.5	2.0	Arsenic	15.8	mg/kg	22.2	13.140
CV37-026	0.5	2.0	Barium	852.0	mg/kg	26400.0	289.380
CV37-026	0.5	2.0	Copper	42.4	mg/kg	40900.0	38.210
CV37-026	0.5	2.0	Vanadium	92.9	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV36-022	0.5	2.0	Barium	330.0	mg/kg	26400.0	289.380
CV36-022	0.5	2.0	Lead	28.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-017	0.5	2.0	Barium	849.0	mg/kg	26400.0	289.380
CV37-017	0.5	2.0	Vanadium	107.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-025	0.5	2.5	Arsenic	33.3	mg/kg	22.2	13.140
CV37-025	0.5	2.5	Barium	731.0	mg/kg	26400.0	289.380
CV37-025	0.5	2.5	Vanadium	94.1	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-016	0.5	2.0	Barium	290.0	mg/kg	26400.0	289.380

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-024	0.5	2.0	Arsenic	26.3	mg/kg	22.2	13.140
CV37-024	0.5	2.0	Barium	789.0	mg/kg	26400.0	289.380

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-015	0.5	2.0	Barium	889.0	mg/kg	26400.0	289.380
CV37-015	0.5	2.0	Strontium	223.0	mg/kg	613000.0	211.380
CV37-015	0.5	2.0	Vanadium	107.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-016	0.0	0.5	Cadmium	2.2	mg/kg	962.0	1.812
CW37-016	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910
CW37-016	0.0	0.5	Strontium	84.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-014	0.5	2.5	Lead	26.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-019	0.0	0.5	Aluminum	19000.0	mg/kg	228000.0	16902.000
CW37-019	0.0	0.5	Barium	280.0	mg/kg	26400.0	141.260
CW37-019	0.0	0.5	Beryllium	1.0	mg/kg	921.0	0.966
CW37-019	0.0	0.5	Cadmium	3.8	mg/kg	962.0	1.812
CW37-019	0.0	0.5	Chromium	18.0	mg/kg	298.0	16.990
CW37-019	0.0	0.5	Lithium	14.0	mg/kg	20400.0	11.550
CW37-019	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CW37-019	0.0	0.5	Strontium	116.0	mg/kg	613000.0	48.940
CW37-019	0.0	0.5	Zinc	79.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-013	0.5	2.0	Arsenic	34.2	mg/kg	22.2	13.140
CV37-013	0.5	2.0	Barium	807.0	mg/kg	26400.0	289.380
CV37-013	0.5	2.0	Vanadium	115.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-012	0.5	2.0	Barium	739.0	mg/kg	26400.0	289.380
CV37-012	0.5	2.0	Vanadium	107.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-028	0.0	0.5	Barium	842.0	mg/kg	26400.0	289.380
CW37-028	0.0	0.5	Vanadium	96.9	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-011	0.5	2.0	Barium	926.0	mg/kg	26400.0	289.380
CV37-011	0.5	2.0	Vanadium	127.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CV37-010	0.5	2.0	Barium	759.0	mg/kg	26400.0	289.380

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-026	0.0	0.5	Aluminum	18000.0	mg/kg	228000.0	16902.000
CW37-026	0.0	0.5	Barium	200.0	mg/kg	26400.0	141.260
CW37-026	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.966
CW37-026	0.0	0.5	Chromium	21.0	mg/kg	298.0	16.990
CW37-026	0.0	0.5	Copper	21.0	mg/kg	40900.0	18.060
CW37-026	0.0	0.5	Iron	21000.0	mg/kg	307000.0	18037.000
CW37-026	0.0	0.5	Lead	59.0	mg/kg	1000.0	54.620
CW37-026	0.0	0.5	Lithium	17.0	mg/kg	20400.0	11.550
CW37-026	0.0	0.5	Nickel	22.0	mg/kg	20400.0	14.910
CW37-026	0.0	0.5	Strontium	79.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-025	0.0	0.5	Aluminum	19000.0	mg/kg	228000.0	16902.000
CW37-025	0.0	0.5	Antimony	2.1	mg/kg	409.0	0.470
CW37-025	0.0	0.5	Barium	210.0	mg/kg	26400.0	141.260
CW37-025	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.966
CW37-025	0.0	0.5	Chromium	19.0	mg/kg	298.0	16.990
CW37-025	0.0	0.5	Copper	20.0	mg/kg	40900.0	18.060
CW37-025	0.0	0.5	Lead	280.0	mg/kg	1000.0	54.620
CW37-025	0.0	0.5	Lithium	18.0	mg/kg	20400.0	11.550
CW37-025	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CW37-025	0.0	0.5	Strontium	77.0	mg/kg	613000.0	48.940
CW37-025	0.0	0.5	Tin	3.0	mg/kg	613000.0	2.900

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW37-027	0.0	0.5	Aluminum	29000.0	mg/kg	228000.0	16902.000
CW37-027	0.0	0.5	Barium	220.0	mg/kg	26400.0	141.260
CW37-027	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.966
CW37-027	0.0	0.5	Chromium	21.0	mg/kg	298.0	16.990
CW37-027	0.0	0.5	Copper	19.0	mg/kg	40900.0	18.060
CW37-027	0.0	0.5	Lithium	17.0	mg/kg	20400.0	11.550
CW37-027	0.0	0.5	Nickel	19.0	mg/kg	20400.0	14.910
CW37-027	0.0	0.5	Strontium	78.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW36-001	0.0	3.0	Copper	49.0	mg/kg	40900.0	38.210
CW36-001	0.0	3.0	Lead	150.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW36-004	0.0	3.0	Arsenic	26.0	mg/kg	22.2	13.140
CW36-004	0.0	3.0	Barium	720.0	mg/kg	26400.0	289.380
CW36-004	0.0	3.0	Copper	57.2	mg/kg	40900.0	38.210
CW36-004	0.0	3.0	Lead	154.0	mg/kg	1000.0	24.970
CW36-004	0.0	3.0	Vanadium	117.0	mg/kg	7150.0	88.490

Figure 11
IHSS Group 900-11
PAC SE 1602
East Firing Range
North Region
Residual Contamination

KEY

- WRW exceedance
- Greater than background or detect

Streams

Lakes

Paved road

Dirt road

PAC

Excavation boundary

DRAFT

N

Scale = 1: 700

75 0 75 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Date: 12.20.04

Prepared by: RAD MS

Prepared for: KAISER•HILL COMPANY

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BZ-A-000776 pg. 89

Figure 10
IHSS Group 900-11
PAC SE 1602
East Firing Range
Outer South Region
Residual Contamination

KEY

- WRW exceedance
- Greater than background or detect
- Streams
- Lakes
- Paved road
- Dirt road
- PAC
- South central locations (see figure 9)
- Excavation boundary

DRAFT

N

Scale = 1: 2500

350 0 350 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Date: 12.20.04

Prepared by: RAOMS

Prepared for: KAISER•HILL COMPANY

File: W:\Projects\FY2005\903 Lip Area Closeout\Firing_Range\firing_range_jb_copy.apr

BZ-A-000776 pg 88

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-065	0.0	0.5	Arsenic	14.5	mg/kg	22.2	10.090
CX31-065	0.0	0.5	Barium	634.0	mg/kg	26400.0	141.260
CX31-065	0.0	0.5	Chromium	99.1	mg/kg	16.990	16.990
CX31-065	0.0	0.5	Copper	33.8	mg/kg	40800.0	16.990
CX31-065	0.0	0.5	Iron	19000.0	mg/kg	307000.0	18037.000
CX31-065	0.0	0.5	Manganese	1260.0	mg/kg	3460.0	365.080
CX31-065	0.0	0.5	Nickel	45.2	mg/kg	20400.0	14.910
CX31-065	0.0	0.5	Strontium	166.0	mg/kg	613000.0	48.940
CX31-065	0.0	0.5	Vanadium	127.0	mg/kg	7150.0	45.590
CX31-065	0.0	0.5	Zinc	107.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-079	0.0	0.5	Arsenic	11.6	mg/kg	22.2	10.090
CX31-079	0.0	0.5	Barium	595.0	mg/kg	26400.0	141.260
CX31-079	0.0	0.5	Chromium	98.6	mg/kg	16.990	16.990
CX31-079	0.0	0.5	Iron	31900.0	mg/kg	307000.0	18037.000
CX31-079	0.0	0.5	Lead	56.4	mg/kg	1000.0	54.620
CX31-079	0.0	0.5	Strontium	161.0	mg/kg	613000.0	48.940
CX31-079	0.0	0.5	Vanadium	100.0	mg/kg	7150.0	45.590
CX31-079	0.0	0.5	Zinc	98.4	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-073	1.0	1.5	Aluminum	25000.0	mg/kg	228000.0	16902.000
CX31-073	1.0	1.5	Barium	220.0	mg/kg	26400.0	141.260
CX31-073	1.0	1.5	Beryllium	1.0	mg/kg	921.0	0.968
CX31-073	1.0	1.5	Chromium	24.0	mg/kg	408.0	16.990
CX31-073	1.0	1.5	Iron	21900.0	mg/kg	307000.0	18037.000
CX31-073	1.0	1.5	Lithium	17.0	mg/kg	11.550	11.550
CX31-073	1.0	1.5	Nickel	22.0	mg/kg	20400.0	14.910
CX31-073	1.0	1.5	Strontium	82.0	mg/kg	613000.0	48.940
CX31-073	1.0	1.5	Vanadium	52.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW22-004	0.0	0.5	Iron	18000.0	mg/kg	307000.0	18037.000
			Manganese	470.0	mg/kg	3460.0	365.080

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW22-005	0.0	0.5	Aluminum	22000.0	mg/kg	228000.0	16902.000
CW22-005	0.0	0.5	Barium	180.0	mg/kg	26400.0	141.260
CW22-005	0.0	0.5	Chromium	24.0	mg/kg	408.0	16.990
CW22-005	0.0	0.5	Iron	19000.0	mg/kg	307000.0	18037.000
CW22-005	0.0	0.5	Lithium	14.0	mg/kg	11.550	11.550
CW22-005	0.0	0.5	Manganese	390.0	mg/kg	3460.0	365.080
CW22-005	0.0	0.5	Nickel	17.0	mg/kg	20400.0	14.910
CW22-005	0.0	0.5	Vanadium	50.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-002	0.0	0.5	Antimony	0.5	mg/kg	408.0	0.470
CX31-002	0.0	0.5	Barium	170.0	mg/kg	26400.0	141.260
CX31-002	0.0	0.5	Chromium	22.0	mg/kg	408.0	16.990
CX31-002	0.0	0.5	Lithium	13.0	mg/kg	11.550	11.550
CX31-002	0.0	0.5	Manganese	450.0	mg/kg	3460.0	365.080
CX31-002	0.0	0.5	Nickel	17.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX32-004	0.0	0.5	Barium	190.0	mg/kg	26400.0	141.260
CX32-004	0.0	0.5	Chromium	23.0	mg/kg	408.0	16.990
CX32-004	0.0	0.5	Iron	22000.0	mg/kg	307000.0	18037.000
CX32-004	0.0	0.5	Lithium	13.0	mg/kg	11.550	11.550
CX32-004	0.0	0.5	Manganese	1160.0	mg/kg	3460.0	365.080
CX32-004	0.0	0.5	Nickel	21.0	mg/kg	20400.0	14.910
CX32-004	0.0	0.5	Strontium	94.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-003	0.0	0.5	Aluminum	17000.0	mg/kg	228000.0	16902.000
CX31-003	0.0	0.5	Barium	170.0	mg/kg	26400.0	141.260
CX31-003	0.0	0.5	Chromium	20.0	mg/kg	408.0	16.990
CX31-003	0.0	0.5	Lithium	13.0	mg/kg	11.550	11.550
CX31-003	0.0	0.5	Manganese	370.0	mg/kg	3460.0	365.080
CX31-003	0.0	0.5	Nickel	16.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX32-005	0.0	0.5	Barium	220.0	mg/kg	26400.0	141.260
CX32-005	0.0	0.5	Copper	19.0	mg/kg	40800.0	16.990
CX32-005	0.0	0.5	Iron	21900.0	mg/kg	307000.0	18037.000
CX32-005	0.0	0.5	Lithium	14.0	mg/kg	11.550	11.550
CX32-005	0.0	0.5	Manganese	1200.0	mg/kg	3460.0	365.080
CX32-005	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910
CX32-005	0.0	0.5	Strontium	92.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-002	0.0	0.5	Barium	240.0	mg/kg	26400.0	141.260
CX31-002	0.0	0.5	Chromium	23.0	mg/kg	408.0	16.990
CX31-002	0.0	0.5	Cobalt	14.2	mg/kg	1500.0	10.910
CX31-002	0.0	0.5	Manganese	660.0	mg/kg	3460.0	365.080
CX31-002	0.0	0.5	Nickel	52.0	mg/kg	20400.0	14.910
			Vanadium	52.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-003	0.0	0.5	Aluminum	17000.0	mg/kg	228000.0	16902.000
CX31-003	0.0	0.5	Chromium	19.0	mg/kg	408.0	16.990
CX31-003	0.0	0.5	Iron	18000.0	mg/kg	307000.0	18037.000
CX31-003	0.0	0.5	Nickel	16.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CP29-000	0.0	0.5	Aluminum	17000.0	mg/kg	228000.0	16902.000
CP29-000	0.0	0.5	Barium	130.0	mg/kg	26400.0	141.260
CP29-000	0.0	0.5	Chromium	22.0	mg/kg	408.0	16.990
CP29-000	0.0	0.5	Iron	17000.0	mg/kg	307000.0	18037.000
CP29-000	0.0	0.5	Lithium	12.0	mg/kg	11.550	11.550
CP29-000	0.0	0.5	Nickel	16.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-009	0.0	0.5	Aluminum	20000.0	mg/kg	228000.0	16902.000
CX31-009	0.0	0.5	Barium	210.0	mg/kg	26400.0	141.260
CX31-009	0.0	0.5	Chromium	26.0	mg/kg	408.0	16.990
CX31-009	0.0	0.5	Copper	30.3	mg/kg	40800.0	16.990
CX31-009	0.0	0.5	Iron	19000.0	mg/kg	307000.0	18037.000
CX31-009	0.0	0.5	Lead	150.0	mg/kg	1000.0	54.620
CX31-009	0.0	0.5	Lithium	16.0	mg/kg	11.550	11.550
CX31-009	0.0	0.5	Nickel	20.0	mg/kg	20400.0	14.910
CX31-009	0.0	0.5	Vanadium	55.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-010	0.0	0.5	Aluminum	25000.0	mg/kg	228000.0	16902.000
CX31-010	0.0	0.5	Antimony	0.6	mg/kg	408.0	0.470
CX31-010	0.0	0.5	Barium	230.0	mg/kg	26400.0	141.260
CX31-010	0.0	0.5	Beryllium	1.4	mg/kg	921.0	0.968
CX31-010	0.0	0.5	Chromium	29.0	mg/kg	408.0	16.990
CX31-010	0.0	0.5	Copper	23.0	mg/kg	40800.0	16.990
CX31-010	0.0	0.5	Iron	24000.0	mg/kg	307000.0	18037.000
CX31-010	0.0	0.5	Lead	19.0	mg/kg	1000.0	54.620
CX31-010	0.0	0.5	Lithium	20.0	mg/kg	11.550	11.550
CX31-010	0.0	0.5	Manganese	540.0	mg/kg	3460.0	365.080
CX31-010	0.0	0.5	Nickel	23.0	mg/kg	20400.0	14.910
CX31-010	0.0	0.5	Vanadium	69.0	mg/kg	7150.0	45.590
CX31-010	0.0	0.5	Zinc	77.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-012	0.0	0.5	Aluminum	18000.0	mg/kg	228000.0	16902.000
CY31-012	0.0	0.5	Barium	190.0	mg/kg	26400.0	141.260
CY31-012	0.0	0.5	Chromium	19.0	mg/kg	408.0	16.990
CY31-012	0.0	0.5	Iron	19000.0	mg/kg	307000.0	18037.000
CY31-012	0.0	0.5	Lithium	18.0	mg/kg	11.550	11.550
			Nickel	18.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-013	0.0	0.5	Aluminum	23000.0	mg/kg	228000.0	16902.000
CY31-013	0.0	0.5	Antimony	0.6	mg/kg	408.0	0.470
CY31-013	0.0	0.5	Barium	230.0	mg/kg	26400.0	141.260
CY31-013	0.0	0.5	Chromium	24.0	mg/kg	408.0	16.990
CY31-013	0.0	0.5	Copper	30.5	mg/kg	40800.0	16.990
CY31-013	0.0	0.5	Iron	25000.0	mg/kg	307000.0	18037.000
CY31-013	0.0	0.5	Lead	21.0	mg/kg	1000.0	54.620
CY31-013	0.0	0.5	Lithium	18.0	mg/kg	11.550	11.550
CY31-013	0.0	0.5	Manganese	490.0	mg/kg	3460.0	365.080
CY31-013	0.0	0.5	Nickel	21.0	mg/kg	20400.0	14.910
CY31-013	0.0	0.5	Vanadium	51.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-004	0.0	0.5	Barium	150.0	mg/kg	26400.0	141.260
CY31-004	0.0	0.5	Cobalt	13.0	mg/kg	1500.0	10.910
CY31-004	0.0	0.5	Iron	18000.0	mg/kg	307000.0	18037.000
CY31-004	0.0	0.5	Lead	66.0	mg/kg	1000.0	54.620
CY31-004	0.0	0.5	Lithium	12.0	mg/kg	11.550	11.550
CY31-004	0.0	0.5	Manganese	1240.0	mg/kg	3460.0	365.080
CY31-004	0.0	0.5	Nickel	25.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-005	0.0	0.5	Aluminum	27000.0	mg/kg	228000.0	16902.000
CY31-005	0.0	0.5	Barium	210.0	mg/kg	26400.0	141.260
CY31-005	0.0	0.5	Beryllium	1.2	mg/kg	921.0	0.968
CY31-005	0.0	0.5	Chromium	24.0	mg/kg	408.0	16.990
CY31-005	0.0	0.5	Copper	20.0	mg/kg	40800.0	16.990
CY31-005	0.0	0.5	Iron	24000.0	mg/kg	307000.0	18037.000
CY31-005	0.0	0.5	Lead	19.0	mg/kg	1000.0	54.620
CY31-005	0.0	0.5	Lithium	20.0	mg/kg	11.550	11.550
CY31-005	0.0	0.5	Manganese	410.0	mg/kg	3460.0	365.080
CY31-005	0.0	0.5	Nickel	22.0	mg/kg	20400.0	14.910
CY31-005	0.0	0.5	Vanadium	58.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-007	0.0	0.5	Aluminum	18000.0	mg/kg	228000.0	16902.000
CY31-007	0.0	0.5	Barium	180.0	mg/kg	26400.0	141.260
CY31-007	0.0	0.5	Beryllium	1.0	mg/kg	921.0	0.968
CY31-007	0.0	0.5	Chromium	19.0	mg/kg	408.0	16.990
CY31-007	0.0	0.5	Iron	19000.0	mg/kg	307000.0	18037.000
CY31-007	0.0	0.5	Lead	12.0	mg/kg	1000.0	54.620
CY31-007	0.0	0.5	Lithium	12.0	mg/kg	11.550	11.550
CY31-007	0.0	0.5	Nickel	17.0	mg/kg	20400.0	14.910
CY31-007	0.0	0.5	Strontium	62.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-008	0.0	0.5	Barium	150.0	mg/kg	26400.0	141.260
CY31-008	0.0	0.5	Chromium	18.0	mg/kg	408.0	16.990
CY31-008	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910
			Strontium	50.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
DA31-002	0.0	0.5	Aluminum	17000.0	mg/kg	228000.0	16902.000
DA31-002	0.0	0.5	Antimony	0.5	mg/kg	408.0	0.470
DA31-002	0.0	0.5	Chromium	19.0	mg/kg	408.0	16.990
DA31-002	0.0	0.5	Lithium	13.0	mg/kg	11.550	11.550
DA31-002	0.0	0.5	Nickel	16.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
DA31-003	0.0	0.5	Aluminum	20000.0	mg/kg	228000.0	16902.000
DA31-003	0.0	0.5	Antimony	0.5	mg/kg	408.0	0.470
DA31-003	0.0	0.5	Barium	170.0	mg/kg	26400.0	141.260
DA31-003	0.0	0.5	Beryllium	1.2	mg/kg	921.0	0.968
DA31-003	0.0	0.5	Chromium	23.0	mg/kg	408.0	16.990
DA31-003	0.0	0.5	Iron	24000.0	mg/kg	307000.0	18037.000
DA31-003	0.0	0.5	Lithium	17.0	mg/kg	11.550	11.550
DA31-003	0.0	0.5	Manganese	370.0	mg/kg	3460.0	365.080
DA31-003	0.0	0.5	Nickel	21.0	mg/kg	20400.0	14.910
DA31-003	0.0	0.5	Strontium	51.0	mg/kg	613000.0	48.940
DA31-003	0.0	0.5	Vanadium	67.0	mg/kg	7150.0	45.590
DA31-003	0.0	0.5	Zinc	83.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
DA31-004	0.0	0.5	Aluminum	22000.0	mg/kg	228000.0	16902.000
DA31-004	0.0	0.5	Barium	180.0	mg/kg	26400.0	141.260
DA31-004	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.968
DA31-004	0.0	0.5	Chromium	23.0	mg/kg	408.0	16.990
DA31-004	0.0	0.5	Iron	23000.0	mg/kg	307000.0	18037.000
DA31-004	0.0	0.5	Lithium	14.0	mg/kg	11.550	11.550
DA31-004	0.0	0.5	Nickel	19.0	mg/kg	20400.0	14.910
DA31-004	0.0	0.5	Strontium	58.0	mg/kg	613000.0	48.940
DA31-004	0.0	0.5	Vanadium	53.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CC31-006	0.0	0.5	Aluminum	25000.0	mg/kg	228000.0	16902.000
CC31-006	0.0	0.5	Barium	300.0	mg/kg	26400.0	141.260
CC31-006	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.968
CC31-006	0.0	0.5	Chromium	25.0	mg/kg	408.0	16.990
CC31-006	0.0	0.5	Copper	19.0	mg/kg	40800.0	16.990
CC31-006	0.0	0.5	Iron	23000.0	mg/kg	307000.0	18037.000
CC31-006	0.0	0.5	Lead	17.0	mg/kg	1000.0	54.620
CC31-006	0.0	0.5	Lithium	21.0	mg/kg	11.550	11.550
CC31-006	0.0	0.5	Nickel	20.0	mg/kg	20400.0	14.910
CC31-006	0.0	0.5	Strontium	52.0	mg/kg	613000.0	48.940
CC31-006	0.0	0.5	Vanadium	52.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-014	0.0	0.5	Aluminum	25000.0	mg/kg	228000.0	16902.000
CY31-014	0.0	0.5	Barium	230.0	mg/kg	26400.0	141.260
CY31-014	0.0	0.5	Beryllium	1.1	mg/kg	921.0	0.968
CY31-014	0.0	0.5	Chromium	25.0	mg/kg	408.0	16.990
CY31-014	0.0	0.5	Iron	23000.0	mg/kg	307000.0	18037.000
CY31-014	0.0	0.5	Lithium	18.0	mg/kg	11.550	11.550
CY31-014	0.0	0.5	Nickel	19.0	mg/kg	20400.0	14.910
CY31-014	0.0	0.5	Vanadium	50.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CC29-005	0.0	0.5	Barium	160.0	mg/kg	26400.0	141.260
CC29-005	0.0	0.5	Beryllium	1.0	mg/kg	921.0	0.968
CC29-005	0.0	0.5	Cobalt	12.0	mg/kg	1500.0	10.910
CC29-005	0.0	0.5	Copper	18.0	mg/kg	40800.0	16.990
CC29-005	0.0	0.5	Nickel	28.0	mg/kg	20400.0	14.910
			Strontium	71.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-011	0.0	0.5	Aluminum	21000.0	mg/kg	228000.0	16902.000
CY31-011	0.0	0.5	Barium	200.0	mg/kg	26400.0	141.260
CY31-011	0.0	0.5	Chromium	22.0	mg/kg	408.0	16.990
CY31-011	0.0	0.5	Iron	20000.0	mg/kg	307000.0	18037.000
CY31-011	0.0	0.5	Lead	16.0	mg/kg	1000.0	54.620
CY31-011	0.0	0.5	Lithium	18.0	mg/kg	11.550	11.550
CY31-011	0.0	0.5	Manganese	380.0	mg/kg	3460.0	365.080
CY31-011	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CY31-011	0.0	0.5	Vanadium	47.0	mg/kg	7150.0	45.590

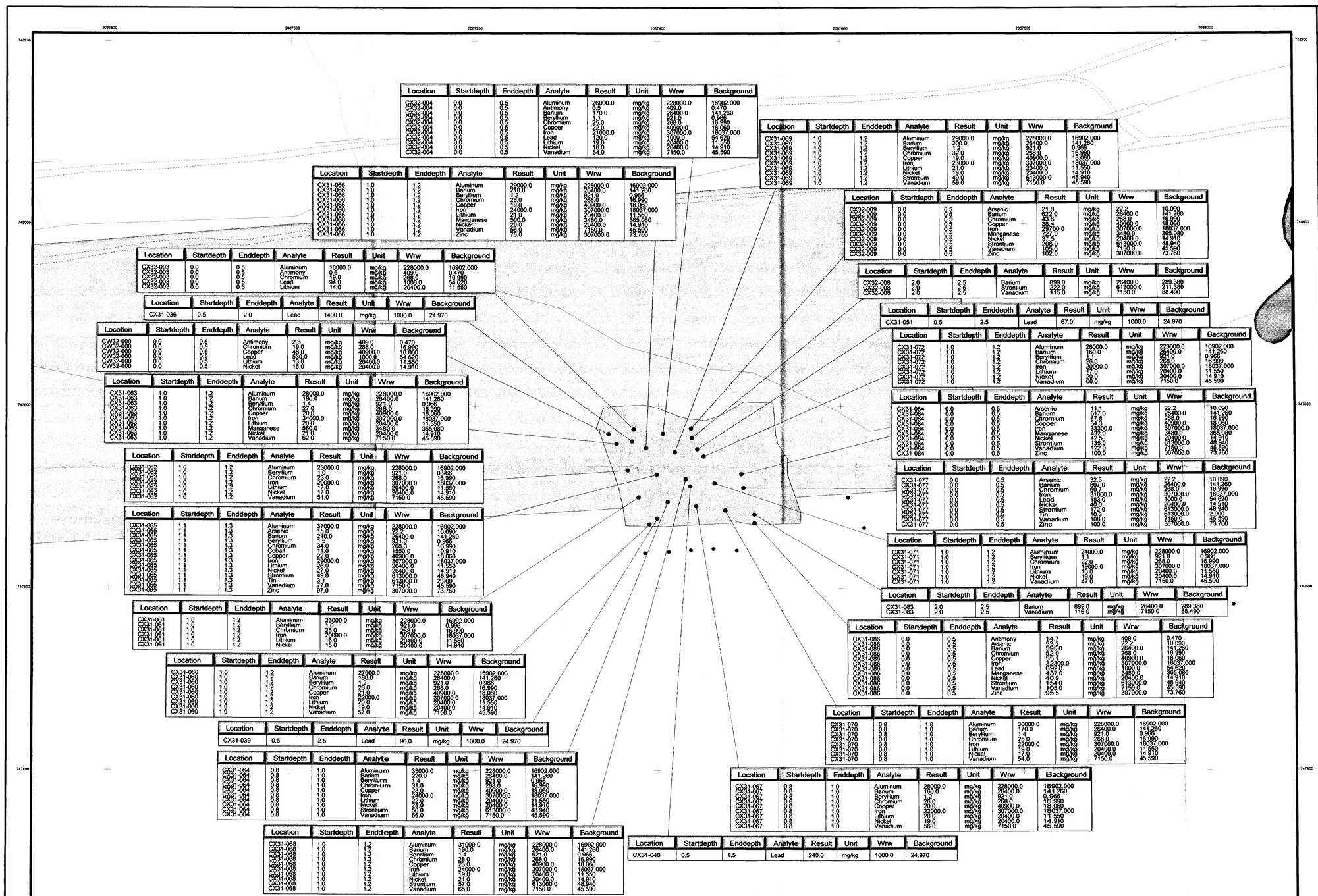
Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY28-000	0.0	0.5	Chromium	19.0	mg/kg	408.0	16.990
CY28-000	0.0	0.5	Lithium	13.0	mg/kg	20400.0	11.550
CY28-000	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CY31-006	0.0	0.5	Antimony	2.5	mg/kg	408.0	0.470
CY31-006	0.0	0.5	Barium	160.0	mg/kg	26400.0	141.260
CY31-006	0.0	0.5	Copper	49.0	mg/kg	40800.0	16.990
CY31-006	0.0	0.5	Iron	26000.0	mg/kg	307000.0	18037.000
CY31-006	0.0	0.5	Lead	140.0	mg/kg	1000.0	54.620
CY31-006	0.0	0.5	Manganese	440.0	mg/kg	3460.0	365.080
CY31-006	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910
CY31-006	0.0	0.5	Strontium	53.0	mg/kg	613000.0	48.940

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-045	0.0	0.5	Antimony	0.5	mg/kg	408.0	0.470
CX31-045	0.0	0.5	Lead	84.0	mg/kg	1000.0	54.620
CX31-045	0.0	0.5	Manganese	400.0	mg/kg	3460.0	365.080
CX31-045	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-050	0.0	0.5	Antimony	0.6	mg/kg	408.0	0.470
CX31-050	0.0	0.5	Chromium	12.0	mg/kg	408.0	16.990
CX31-050	0.0	0.5	Lead	71.0	mg/kg	1000.0	54.620
			Manganese	370.0	mg/kg	3460.0	365.080

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-055	0.0	0.5	Lead	57.0	mg/kg	1000.0	54.620



Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX32-004	0.0	0.5	Aluminum	26000.0	mg/kg	228000.0	16902.000
CX32-004	0.0	0.5	Antimony	0.5	mg/kg	409.0	0.470
CX32-004	0.0	0.5	Barium	170.0	mg/kg	26400.0	141.260
CX32-004	0.0	0.5	Beryllium	1.5	mg/kg	921.0	0.966
CX32-004	0.0	0.5	Chromium	25.0	mg/kg	268.0	16.990
CX32-004	0.0	0.5	Copper	22.0	mg/kg	40900.0	18.060
CX32-004	0.0	0.5	Iron	21000.0	mg/kg	307000.0	18037.000
CX32-004	0.0	0.5	Lead	120.0	mg/kg	1000.0	54.620
CX32-004	0.0	0.5	Lithium	19.0	mg/kg	20400.0	11.550
CX32-004	0.0	0.5	Nickel	18.0	mg/kg	20400.0	14.910
CX32-004	0.0	0.5	Vanadium	54.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-066	1.0	1.2	Aluminum	29000.0	mg/kg	228000.0	16902.000
CX31-066	1.0	1.2	Barium	210.0	mg/kg	26400.0	141.260
CX31-066	1.0	1.2	Beryllium	1.2	mg/kg	921.0	0.966
CX31-066	1.0	1.2	Chromium	26.0	mg/kg	268.0	16.990
CX31-066	1.0	1.2	Copper	19.0	mg/kg	40900.0	18.060
CX31-066	1.0	1.2	Iron	24000.0	mg/kg	307000.0	18037.000
CX31-066	1.0	1.2	Lithium	21.0	mg/kg	20400.0	11.550
CX31-066	1.0	1.2	Manganese	500.0	mg/kg	3480.0	365.080
CX31-066	1.0	1.2	Nickel	20.0	mg/kg	20400.0	14.910
CX31-066	1.0	1.2	Vanadium	76.0	mg/kg	7150.0	45.590
CX31-066	1.0	1.2	Zinc	76.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX32-003	0.0	0.5	Aluminum	18000.0	mg/kg	228000.0	16902.000
CX32-003	0.0	0.5	Antimony	0.8	mg/kg	409.0	0.470
CX32-003	0.0	0.5	Chromium	19.0	mg/kg	268.0	16.990
CX32-003	0.0	0.5	Lead	94.0	mg/kg	1000.0	54.620
CX32-003	0.0	0.5	Lithium	14.0	mg/kg	20400.0	11.550

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-036	0.5	2.0	Lead	1400.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CW32-000	0.0	0.5	Antimony	2.3	mg/kg	409.0	0.470
CW32-000	0.0	0.5	Chromium	19.0	mg/kg	268.0	16.990
CW32-000	0.0	0.5	Copper	48.0	mg/kg	40900.0	18.060
CW32-000	0.0	0.5	Lead	530.0	mg/kg	1000.0	54.620
CW32-000	0.0	0.5	Lithium	13.0	mg/kg	20400.0	11.550
CW32-000	0.0	0.5	Nickel	15.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-063	1.0	1.2	Aluminum	28000.0	mg/kg	228000.0	16902.000
CX31-063	1.0	1.2	Barium	190.0	mg/kg	26400.0	141.260
CX31-063	1.0	1.2	Beryllium	1.4	mg/kg	921.0	0.966
CX31-063	1.0	1.2	Chromium	27.0	mg/kg	268.0	16.990
CX31-063	1.0	1.2	Copper	20.0	mg/kg	40900.0	18.060
CX31-063	1.0	1.2	Iron	34000.0	mg/kg	307000.0	18037.000
CX31-063	1.0	1.2	Lithium	20.0	mg/kg	20400.0	11.550
CX31-063	1.0	1.2	Manganese	560.0	mg/kg	3480.0	365.080
CX31-063	1.0	1.2	Nickel	21.0	mg/kg	20400.0	14.910
CX31-063	1.0	1.2	Vanadium	62.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-062	1.0	1.2	Aluminum	23000.0	mg/kg	228000.0	16902.000
CX31-062	1.0	1.2	Beryllium	1.0	mg/kg	921.0	0.966
CX31-062	1.0	1.2	Chromium	23.0	mg/kg	268.0	16.990
CX31-062	1.0	1.2	Iron	20000.0	mg/kg	307000.0	18037.000
CX31-062	1.0	1.2	Lithium	17.0	mg/kg	20400.0	11.550
CX31-062	1.0	1.2	Nickel	17.0	mg/kg	20400.0	14.910
CX31-062	1.0	1.2	Vanadium	51.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-065	1.1	1.3	Aluminum	37000.0	mg/kg	228000.0	16902.000
CX31-065	1.1	1.3	Arsenic	15.0	mg/kg	22.2	10.090
CX31-065	1.1	1.3	Barium	210.0	mg/kg	26400.0	141.260
CX31-065	1.1	1.3	Beryllium	1.5	mg/kg	921.0	0.966
CX31-065	1.1	1.3	Chromium	34.0	mg/kg	268.0	16.990
CX31-065	1.1	1.3	Cobalt	11.0	mg/kg	12500.0	10.910
CX31-065	1.1	1.3	Copper	22.0	mg/kg	40900.0	18.060
CX31-065	1.1	1.3	Iron	29000.0	mg/kg	307000.0	18037.000
CX31-065	1.1	1.3	Lithium	26.0	mg/kg	20400.0	11.550
CX31-065	1.1	1.3	Nickel	27.0	mg/kg	20400.0	14.910
CX31-065	1.1	1.3	Strontium	49.0	mg/kg	613000.0	48.940
CX31-065	1.1	1.3	Tin	3.1	mg/kg	613000.0	2.900
CX31-065	1.1	1.3	Vanadium	97.0	mg/kg	7150.0	45.590
CX31-065	1.1	1.3	Zinc	97.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-061	1.0	1.2	Aluminum	23000.0	mg/kg	228000.0	16902.000
CX31-061	1.0	1.2	Beryllium	1.0	mg/kg	921.0	0.966
CX31-061	1.0	1.2	Chromium	25.0	mg/kg	268.0	16.990
CX31-061	1.0	1.2	Iron	20000.0	mg/kg	307000.0	18037.000
CX31-061	1.0	1.2	Lithium	16.0	mg/kg	20400.0	11.550
CX31-061	1.0	1.2	Nickel	15.0	mg/kg	20400.0	14.910

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-060	1.0	1.2	Aluminum	27000.0	mg/kg	228000.0	16902.000
CX31-060	1.0	1.2	Barium	180.0	mg/kg	26400.0	141.260
CX31-060	1.0	1.2	Beryllium	1.2	mg/kg	921.0	0.966
CX31-060	1.0	1.2	Chromium	26.0	mg/kg	268.0	16.990
CX31-060	1.0	1.2	Copper	21.0	mg/kg	40900.0	18.060
CX31-060	1.0	1.2	Iron	22000.0	mg/kg	307000.0	18037.000
CX31-060	1.0	1.2	Lithium	20.0	mg/kg	20400.0	11.550
CX31-060	1.0	1.2	Nickel	19.0	mg/kg	20400.0	14.910
CX31-060	1.0	1.2	Vanadium	57.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-039	0.5	2.5	Lead	96.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-064	0.8	1.0	Aluminum	33000.0	mg/kg	228000.0	16902.000
CX31-064	0.8	1.0	Barium	220.0	mg/kg	26400.0	141.260
CX31-064	0.8	1.0	Beryllium	1.4	mg/kg	921.0	0.966
CX31-064	0.8	1.0	Chromium	31.0	mg/kg	268.0	16.990
CX31-064	0.8	1.0	Copper	23.0	mg/kg	40900.0	18.060
CX31-064	0.8	1.0	Iron	24000.0	mg/kg	307000.0	18037.000
CX31-064	0.8	1.0	Lithium	22.0	mg/kg	20400.0	11.550
CX31-064	0.8	1.0	Nickel	23.0	mg/kg	20400.0	14.910
CX31-064	0.8	1.0	Strontium	50.0	mg/kg	613000.0	48.940
CX31-064	0.8	1.0	Vanadium	66.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-068	1.0	1.2	Aluminum	31000.0	mg/kg	228000.0	16902.000
CX31-068	1.0	1.2	Barium	190.0	mg/kg	26400.0	141.260
CX31-068	1.0	1.2	Beryllium	1.4	mg/kg	921.0	0.966
CX31-068	1.0	1.2	Chromium	28.0	mg/kg	268.0	16.990
CX31-068	1.0	1.2	Copper	23.0	mg/kg	40900.0	18.060
CX31-068	1.0	1.2	Iron	24000.0	mg/kg	307000.0	18037.000
CX31-068	1.0	1.2	Lithium	19.0	mg/kg	20400.0	11.550
CX31-068	1.0	1.2	Nickel	21.0	mg/kg	20400.0	14.910
CX31-068	1.0	1.2	Strontium	57.0	mg/kg	613000.0	48.940
CX31-068	1.0	1.2	Vanadium	65.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-048	0.5	1.5	Lead	240.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-069	1.0	1.2	Aluminum	29000.0	mg/kg	228000.0	16902.000
CX31-069	1.0	1.2	Barium	200.0	mg/kg	26400.0	141.260
CX31-069	1.0	1.2	Beryllium	1.2	mg/kg	921.0	0.966
CX31-069	1.0	1.2	Chromium	32.0	mg/kg	268.0	16.990
CX31-069	1.0	1.2	Copper	19.0	mg/kg	40900.0	18.060
CX31-069	1.0	1.2	Iron	23000.0	mg/kg	307000.0	18037.000
CX31-069	1.0	1.2	Lithium	21.0	mg/kg	20400.0	11.550
CX31-069	1.0	1.2	Nickel	19.0	mg/kg	20400.0	14.910
CX31-069	1.0	1.2	Strontium	49.0	mg/kg	613000.0	48.940
CX31-069	1.0	1.2	Vanadium	59.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX32-009	0.0	0.5	Arsenic	21.8	mg/kg	22.2	10.090
CX32-009	0.0	0.5	Barium	622.0	mg/kg	26400.0	141.260
CX32-009	0.0	0.5	Chromium	43.6	mg/kg	268.0	16.990
CX32-009	0.0	0.5	Copper	38.4	mg/kg	40900.0	18.060
CX32-009	0.0	0.5	Iron	29700.0	mg/kg	307000.0	18037.000
CX32-009	0.0	0.5	Manganese	737.0	mg/kg	3480.0	365.080
CX32-009	0.0	0.5	Nickel	47.5	mg/kg	20400.0	14.910
CX32-009	0.0	0.5	Strontium	208.0	mg/kg	613000.0	48.940
CX32-009	0.0	0.5	Vanadium	105.0	mg/kg	7150.0	45.590
CX32-009	0.0	0.5	Zinc	102.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX32-008	2.0	2.5	Barium	899.0	mg/kg	26400.0	289.380
CX32-008	2.0	2.5	Strontium	222.0	mg/kg	613000.0	211.380
CX32-008	2.0	2.5	Vanadium	115.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-051	0.5	2.5	Lead	67.0	mg/kg	1000.0	24.970

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-072	1.0	1.2	Aluminum	26000.0	mg/kg	228000.0	16902.000
CX31-072	1.0	1.2	Barium	190.0	mg/kg	26400.0	141.260
CX31-072	1.0	1.2	Beryllium	1.1	mg/kg	921.0	0.966
CX31-072	1.0	1.2	Chromium	26.0	mg/kg	268.0	16.990
CX31-072	1.0	1.2	Iron	20000.0	mg/kg	307000.0	18037.000
CX31-072	1.0	1.2	Lithium	17.0	mg/kg	20400.0	11.550
CX31-072	1.0	1.2	Nickel	20.0	mg/kg	20400.0	14.910
CX31-072	1.0	1.2	Vanadium	60.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-084	0.0	0.5	Arsenic	11.1	mg/kg	22.2	10.090
CX31-084	0.0	0.5	Barium	617.0	mg/kg	26400.0	141.260
CX31-084	0.0	0.5	Chromium	51.8	mg/kg	268.0	16.990
CX31-084	0.0	0.5	Copper	34.3	mg/kg	40900.0	18.060
CX31-084	0.0	0.5	Iron	33300.0	mg/kg	307000.0	18037.000
CX31-084	0.0	0.5	Manganese	432.0	mg/kg	3480.0	365.080
CX31-084	0.0	0.5	Nickel	42.5	mg/kg	20400.0	14.910
CX31-084	0.0	0.5	Strontium	135.0	mg/kg	613000.0	48.940
CX31-084	0.0	0.5	Vanadium	122.0	mg/kg	7150.0	45.590
CX31-084	0.0	0.5	Zinc	100.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-077	0.0	0.5	Arsenic	32.3	mg/kg	22.2	10.090
CX31-077	0.0	0.5	Barium	907.0	mg/kg	26400.0	141.260
CX31-077	0.0	0.5	Chromium	60.7	mg/kg	268.0	16.990
CX31-077	0.0	0.5	Iron	31800.0	mg/kg	307000.0	18037.000
CX31-077	0.0	0.5	Lead	183.0	mg/kg	1000.0	54.620
CX31-077	0.0	0.5	Nickel	40.0	mg/kg	20400.0	14.910
CX31-077	0.0	0.5	Strontium	172.0	mg/kg	613000.0	48.940
CX31-077	0.0	0.5	Tin	10.3	mg/kg	613000.0	2.900
CX31-077	0.0	0.5	Vanadium	108.0	mg/kg	7150.0	45.590
CX31-077	0.0	0.5	Zinc	100.0	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-071	1.0	1.2	Aluminum	24000.0	mg/kg	228000.0	16902.000
CX31-071	1.0	1.2	Beryllium	1.1	mg/kg	921.0	0.966
CX31-071	1.0	1.2	Chromium	22.0	mg/kg	268.0	16.990
CX31-071	1.0	1.2	Iron	19000.0	mg/kg	307000.0	18037.000
CX31-071	1.0	1.2	Lithium	16.0	mg/kg	20400.0	11.550
CX31-071	1.0	1.2	Nickel	19.0	mg/kg	20400.0	14.910
CX31-071	1.0	1.2	Vanadium	47.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-083	2.0	2.5	Barium	892.0	mg/kg	26400.0	289.380
CX31-083	2.0	2.5	Vanadium	116.0	mg/kg	7150.0	88.490

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-086	0.0	0.5	Antimony	14.7	mg/kg	409.0	0.470
CX31-086	0.0	0.5	Arsenic	53.7	mg/kg	22.2	10.090
CX31-086	0.0	0.5	Barium	2995.0	mg/kg	26400.0	141.260
CX31-086	0.0	0.5	Chromium	52.1	mg/kg	268.0	16.990
CX31-086	0.0	0.5	Copper	255.7	mg/kg	40900.0	18.060
CX31-086	0.0	0.5	Iron	125000.0	mg/kg	307000.0	18037.000
CX31-086	0.0	0.5	Lead	2622.0	mg/kg	1000.0	54.620
CX31-086	0.0	0.5	Manganese	437.0	mg/kg	3480.0	365.080
CX31-086	0.0	0.5	Nickel	49.8	mg/kg	20400.0	14.910
CX31-086	0.0	0.5	Strontium	154.0	mg/kg	613000.0	48.940
CX31-086	0.0	0.5	Vanadium	106.0	mg/kg	7150.0	45.590
CX31-086	0.0	0.5	Zinc	95.5	mg/kg	307000.0	73.760

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-070	0.8	1.0	Aluminum	30000.0	mg/kg	228000.0	16902.000
CX31-070	0.8	1.0	Barium	170.0	mg/kg	26400.0	141.260
CX31-070	0.8	1.0	Beryllium	1.4	mg/kg	921.0	0.966
CX31-070	0.8	1.0	Chromium	25.0	mg/kg	268.0	16.990
CX31-070	0.8	1.0	Iron	22000.0	mg/kg	307000.0	18037.000
CX31-070	0.8	1.0	Lithium	19.0	mg/kg	20400.0	11.550
CX31-070	0.8	1.0	Nickel	17.0	mg/kg	20400.0	14.910
CX31-070	0.8	1.0	Vanadium	54.0	mg/kg	7150.0	45.590

Location	Startdepth	Enddepth	Analyte	Result	Unit	Wrw	Background
CX31-067	0.8	1.0	Aluminum	28000.0	mg/kg	228000.0	16902.000
CX31-067	0.8	1.0	Barium	160.0	mg/kg	26400.0	141.260
CX31-067	0.8	1.0	Beryllium	1.2	mg/kg	921.0	0.966
CX31-067	0.8	1.0	Chromium	26.0	mg/kg	268.0	16.990
CX31-067	0.8	1.0	Copper	20.0	mg/kg	40900.0	18.060
CX31-067	0.8	1.0	Iron	22000.0	mg/kg	307000.0	18037.000
CX31-067	0.8	1.0	Lithium	20.0	mg/kg	20400.0	11.550
CX31-067	0.8	1.0	Nickel	19.0	mg/kg	20400.0	14.910
CX31-067	0.8	1.0	Vanadium	56.0	mg/kg	7150.0	45.590

Figure 9
IHSS Group 900-11
PAC SE 1602
East Firing Range
South Central Region
Residual Contamination

KEY

- WRW exceedance
- Greater than background or detect
- Streams
- Lakes
- Paved road
- Dirt road
- PAC
- Outer south locations (see figure 10)
- Excavation boundary

DRAFT

N

Scale = 1: 675

75 0 75 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

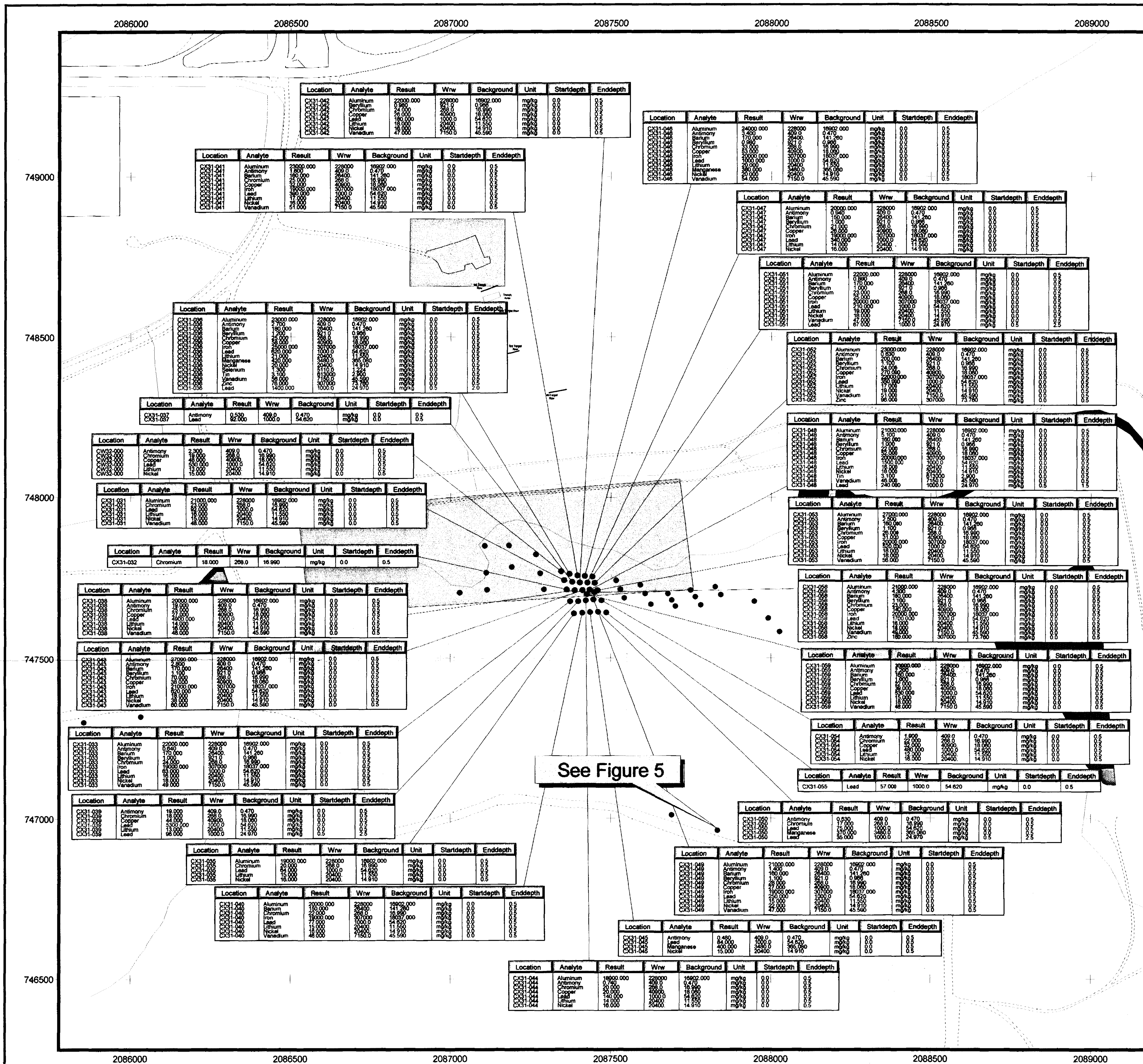
Date: 12.20.04

Prepared by: RADIAN

Prepared for: KAISER-HILL COMPANY

File: W:\Projects\FY2005\903 Lip Area Closeout\Firing_Range\firing_range_jb_copy.apr

FIGURE 6
IHSS Group 900-11
PAC SE-1602
East Firing Range
South Central Area
Characterization
Sample Locations
and Results



Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-042	Aluminum	22000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-042	Beryllium	0.980	921.0	0.966	mg/kg	0.0	0.5
CX31-042	Chromium	24.000	268.0	16.990	mg/kg	0.0	0.5
CX31-042	Copper	26.000	40900.	18.060	mg/kg	0.0	0.5
CX31-042	Lead	180.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-042	Lithium	18.000	20400.	11.550	mg/kg	0.0	0.5
CX31-042	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5
CX31-042	Vanadium	47.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-046	Aluminum	24000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-046	Antimony	3.400	409.0	0.470	mg/kg	0.0	0.5
CX31-046	Barium	170.000	26400.	141.260	mg/kg	0.0	0.5
CX31-046	Beryllium	0.980	921.0	0.966	mg/kg	0.0	0.5
CX31-046	Chromium	33.000	268.0	16.990	mg/kg	0.0	0.5
CX31-046	Copper	53.000	40900	18.060	mg/kg	0.0	0.5
CX31-046	Iron	20000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-046	Lead	1000.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-046	Lithium	20.000	20400	11.550	mg/kg	0.0	0.5
CX31-046	Manganese	380.000	3480.0	365.080	mg/kg	0.0	0.5
CX31-046	Nickel	20.000	20400	14.910	mg/kg	0.0	0.5
CX31-046	Vanadium	54.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-041	Aluminum	23000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-041	Antimony	1.800	409.0	0.470	mg/kg	0.0	0.5
CX31-041	Barium	160.000	26400.	141.260	mg/kg	0.0	0.5
CX31-041	Chromium	25.000	268.0	16.990	mg/kg	0.0	0.5
CX31-041	Copper	32.000	40900.	18.060	mg/kg	0.0	0.5
CX31-041	Iron	19000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-041	Lead	390.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-041	Lithium	17.000	20400.	11.550	mg/kg	0.0	0.5
CX31-041	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5
CX31-041	Vanadium	51.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-047	Aluminum	20000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-047	Antimony	0.940	409.0	0.470	mg/kg	0.0	0.5
CX31-047	Barium	150.000	26400.	141.260	mg/kg	0.0	0.5
CX31-047	Beryllium	1.000	921.0	0.966	mg/kg	0.0	0.5
CX31-047	Chromium	21.000	268.0	16.990	mg/kg	0.0	0.5
CX31-047	Copper	26.000	40900.	18.060	mg/kg	0.0	0.5
CX31-047	Iron	19000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-047	Lead	340.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-047	Lithium	14.000	20400.	11.550	mg/kg	0.0	0.5
CX31-047	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-051	Aluminum	22000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-051	Antimony	0.890	409.0	0.470	mg/kg	0.0	0.5
CX31-051	Barium	170.000	26400.	141.260	mg/kg	0.0	0.5
CX31-051	Beryllium	1.000	921.0	0.966	mg/kg	0.0	0.5
CX31-051	Chromium	23.000	268.0	16.990	mg/kg	0.0	0.5
CX31-051	Copper	25.000	40900	18.060	mg/kg	0.0	0.5
CX31-051	Iron	20000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-051	Lead	210.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-051	Lithium	19.000	20400.	11.550	mg/kg	0.0	0.5
CX31-051	Nickel	18.000	20400.	14.910	mg/kg	0.0	0.5
CX31-051	Vanadium	47.000	7150.0	45.590	mg/kg	0.0	0.5
CX31-051	Lead	67.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-036	Aluminum	23000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-036	Antimony	2.700	409.0	0.470	mg/kg	0.0	0.5
CX31-036	Barium	180.000	26400.	141.260	mg/kg	0.0	0.5
CX31-036	Beryllium	1.200	921.0	0.966	mg/kg	0.0	0.5
CX31-036	Chromium	25.000	268.0	16.990	mg/kg	0.0	0.5
CX31-036	Copper	58.000	40900	18.060	mg/kg	0.0	0.5
CX31-036	Iron	25000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-036	Lead	620.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-036	Lithium	21.000	20400	11.550	mg/kg	0.0	0.5
CX31-036	Manganese	420.000	3480.0	365.080	mg/kg	0.0	0.5
CX31-036	Nickel	20.000	20400	14.910	mg/kg	0.0	0.5
CX31-036	Selenium	1.300	5110.0	1.224	mg/kg	0.0	0.5
CX31-036	Tin	3.100	613000	2.900	mg/kg	0.0	0.5
CX31-036	Vanadium	56.000	7150.0	45.590	mg/kg	0.0	0.5
CX31-036	Zinc	76.000	307000	73.760	mg/kg	0.0	0.5
CX31-036	Lead	1400.000	1000.0	24.970	mg/kg	0.5	2.0

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-052	Aluminum	23000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-052	Antimony	0.630	409.0	0.470	mg/kg	0.0	0.5
CX31-052	Barium	200.000	26400.	141.260	mg/kg	0.0	0.5
CX31-052	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CX31-052	Chromium	24.000	268.0	16.990	mg/kg	0.0	0.5
CX31-052	Copper	270.000	40900	18.060	mg/kg	0.0	0.5
CX31-052	Iron	22000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-052	Lead	350.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-052	Lithium	17.000	20400.	11.550	mg/kg	0.0	0.5
CX31-052	Nickel	19.000	20400.	14.910	mg/kg	0.0	0.5
CX31-052	Vanadium	51.000	7150.0	45.590	mg/kg	0.0	0.5
CX31-052	Zinc	96.000	307000	73.760	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-037	Antimony	0.530	409.0	0.470	mg/kg	0.0	0.5
CX31-037	Lead	92.000	1000.0	54.620	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-048	Aluminum	21000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-048	Antimony	5.100	409.0	0.470	mg/kg	0.0	0.5
CX31-048	Barium	160.000	26400.	141.260	mg/kg	0.0	0.5
CX31-048	Beryllium	1.000	921.0	0.966	mg/kg	0.0	0.5
CX31-048	Chromium	22.000	268.0	16.990	mg/kg	0.0	0.5
CX31-048	Copper	52.000	40900	18.060	mg/kg	0.0	0.5
CX31-048	Iron	20000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-048	Lead	1500.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-048	Lithium	18.000	20400	11.550	mg/kg	0.0	0.5
CX31-048	Nickel	18.000	20400	14.910	mg/kg	0.0	0.5
CX31-048	Tin	3.100	613000	2.900	mg/kg	0.0	0.5
CX31-048	Vanadium	46.000	7150.0	45.590	mg/kg	0.0	0.5
CX31-048	Lead	240.000	1000.0	24.970	mg/kg	0.5	1.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CW32-000	Antimony	2.300	409.0	0.470	mg/kg	0.0	0.5
CW32-000	Chromium	19.000	268.0	16.990	mg/kg	0.0	0.5
CW32-000	Copper	48.000	40900.	18.060	mg/kg	0.0	0.5
CW32-000	Lead	530.000	1000.0	54.620	mg/kg	0.0	0.5
CW32-000	Lithium	13.000	20400.	11.550	mg/kg	0.0	0.5
CW32-000	Nickel	15.000	20400.	14.910	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-031	Aluminum	21000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-031	Chromium	23.000	268.0	16.990	mg/kg	0.0	0.5
CX31-031	Lead	92.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-031	Lithium	16.000	20400.	11.550	mg/kg	0.0	0.5
CX31-031	Nickel	15.000	20400.	14.910	mg/kg	0.0	0.5
CX31-031	Vanadium	48.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-053	Aluminum	27000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-053	Antimony	2.500	409.0	0.470	mg/kg	0.0	0.5
CX31-053	Barium	160.000	26400.	141.260	mg/kg	0.0	0.5
CX31-053	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CX31-053	Chromium	26.000	268.0	16.990	mg/kg	0.0	0.5
CX31-053	Copper	31.000	40900	18.060	mg/kg	0.0	0.5
CX31-053	Iron	20000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-053	Lead	520.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-053	Lithium	18.000	20400.	11.550	mg/kg	0.0	0.5
CX31-053	Nickel	18.000	20400.	14.910	mg/kg	0.0	0.5
CX31-053	Vanadium	56.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-032	Chromium	18.000	268.0	16.990	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-058	Aluminum	21000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-058	Antimony	4.300	409.0	0.470	mg/kg	0.0	0.5
CX31-058	Barium	180.000	26400.	141.260	mg/kg	0.0	0.5
CX31-058	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CX31-058	Chromium	23.000	268.0	16.990	mg/kg	0.0	0.5
CX31-058	Copper	140.000	40900	18.060	mg/kg	0.0	0.5
CX31-058	Iron	20000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-058	Lead	1700.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-058	Lithium	16.000	20400.	11.550	mg/kg	0.0	0.5
CX31-058	Nickel	18.000	20400.	14.910	mg/kg	0.0	0.5
CX31-058	Vanadium	49.000	7150.0	45.590	mg/kg	0.0	0.5
CX31-058	Zinc	180.000	307000	73.760	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-038	Aluminum	20000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-038	Antimony	19.000	409.0	0.470	mg/kg	0.0	0.5
CX31-038	Chromium	25.000	268.0	16.990	mg/kg	0.0	0.5
CX31-038	Copper	27.000	40900	18.060	mg/kg	0.0	0.5
CX31-038	Lead	4900.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-038	Lithium	14.000	20400.	11.550	mg/kg	0.0	0.5
CX31-038	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5
CX31-038	Vanadium	48.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-043	Aluminum	27000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-043	Antimony	2.800	409.0	0.470	mg/kg	0.0	0.5
CX31-043	Barium	170.000	26400.	141.260	mg/kg	0.0	0.5
CX31-043	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CX31-043	Chromium	70.000	268.0	16.990	mg/kg	0.0	0.5
CX31-043	Copper	38.000	40900.	18.060	mg/kg	0.0	0.5
CX31-043	Iron	21000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-043	Lead	620.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-043	Lithium	18.000	20400.	11.550	mg/kg	0.0	0.5
CX31-043	Nickel	38.000	20400.	14.910	mg/kg	0.0	0.5
CX31-043	Vanadium	60.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-059	Aluminum	20000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-059	Antimony	2.200	409.0	0.470	mg/kg	0.0	0.5
CX31-059	Barium	160.000	26400.	141.260	mg/kg	0.0	0.5
CX31-059	Beryllium	1.000	921.0	0.966	mg/kg	0.0	0.5
CX31-059	Chromium	22.000	268.0	16.990	mg/kg	0.0	0.5
CX31-059	Copper	39.000	40900.	18.060	mg/kg	0.0	0.5
CX31-059	Lead	830.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-059	Lithium	15.000	20400	11.550	mg/kg	0.0	0.5
CX31-059	Nickel	18.000	20400.	14.910	mg/kg	0.0	0.5
CX31-059	Vanadium	48.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-033	Aluminum	22000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-033	Antimony	0.640	409.0	0.470	mg/kg	0.0	0.5
CX31-033	Barium	170.000	26400.	141.260	mg/kg	0.0	0.5
CX31-033	Beryllium	1.000	921.0	0.966	mg/kg	0.0	0.5
CX31-033	Chromium	24.000	268.0	16.990	mg/kg	0.0	0.5
CX31-033	Iron	19000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-033	Lead	63.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-033	Lithium	16.000	20400.	11.550	mg/kg	0.0	0.5
CX31-033	Nickel	18.000	20400.	14.910	mg/kg	0.0	0.5
CX31-033	Vanadium	49.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-054	Antimony	1.900	409.0	0.470	mg/kg	0.0	0.5
CX31-054	Chromium	22.000	268.0	16.990	mg/kg	0.0	0.5
CX31-054	Copper	32.000	40900.	18.060	mg/kg	0.0	0.5
CX31-054	Lead	480.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-054	Lithium	12.000	20400.	11.550	mg/kg	0.0	0.5
CX31-054	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-055	Lead	57.000	1000.0	54.620	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-039	Antimony	19.000	409.0	0.470	mg/kg	0.0	0.5
CX31-039	Chromium	18.000	268.0	16.990	mg/kg	0.0	0.5
CX31-039	Copper	44.000	40900.	18.060	mg/kg	0.0	0.5
CX31-039	Lead	5300.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-039	Lithium	13.000	20400.	11.550	mg/kg	0.0	0.5
CX31-039	Lead	96.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-050	Antimony	0.630	409.0	0.470	mg/kg	0.0	0.5
CX31-050	Chromium	17.000	268.0	16.990	mg/kg	0.0	0.5
CX31-050	Lead	75.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-050	Manganese	370.000	3480.0	365.080	mg/kg	0.0	0.5
CX31-050	Lead	35.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-035	Aluminum	19000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-035	Chromium	20.000	268.0	16.990	mg/kg	0.0	0.5
CX31-035	Lead	64.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-035	Lithium	15.000	20400.	11.550	mg/kg	0.0	0.5
CX31-035	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-049	Aluminum	21000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-049	Antimony	1.400	409.0	0.470	mg/kg	0.0	0.5
CX31-049	Barium	160.000	26400.	141.260	mg/kg	0.0	0.5
CX31-049	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CX31-049	Chromium	28.000	268.0	16.990	mg/kg	0.0	0.5
CX31-049	Copper	27.000	40900	18.060	mg/kg	0.0	0.5
CX31-049	Iron	19000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-049	Lead	250.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-049	Lithium	15.000	20400.	11.550	mg/kg	0.0	0.5
CX31-049	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CX31-049	Vanadium	47.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-040	Aluminum	20000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-040	Barium	150.000	26400.	141.260	mg/kg	0.0	0.5
CX31-040	Chromium	22.000	268.0	16.990	mg/kg	0.0	0.5
CX31-040	Iron	19000.000	307000	18037.000	mg/kg	0.0	0.5
CX31-040	Lead	77.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-040	Lithium	15.000	20400.	11.550	mg/kg	0.0	0.5
CX31-040	Nickel	18.000	20400.	14.910	mg/kg	0.0	0.5
CX31-040	Vanadium	46.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-045	Antimony	0.480	409.0	0.470	mg/kg	0.0	0.5
CX31-045	Lead	84.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-045	Manganese	400.000	3480.0	365.080	mg/kg	0.0	0.5
CX31-045	Nickel	15.000	20400.	14.910	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CX31-044	Aluminum	18000.000	228000	16902.000	mg/kg	0.0	0.5
CX31-044	Antimony	0.740	409.0	0.470	mg/kg	0.0	0.5
CX31-044	Chromium	20.000	268.0	16.990	mg/kg	0.0	0.5
CX31-044	Copper	20.000	40900.	18.060	mg/kg	0.0	0.5
CX31-044	Lead	140.000	1000.0	54.620	mg/kg	0.0	0.5
CX31-044	Lithium	14.000	20400.	11.550	mg/kg	0.0	0.5
CX31-044	Nickel	16.000	20400.	14.910	mg/kg	0.0	0.5

KEY

- ● Sampling location with results greater than wildlife refuge worker action level
- ● Sampling location with results greater than background means plus 2 standard deviations or reporting limits
- PAC SE-1602 East Firing Range
- Paved road
- Dirt road
- Stream
- Pond

DRAFT

N
W E
S

100 0 100 200 300 400 Feet

Scale 1:2700

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: RADMS

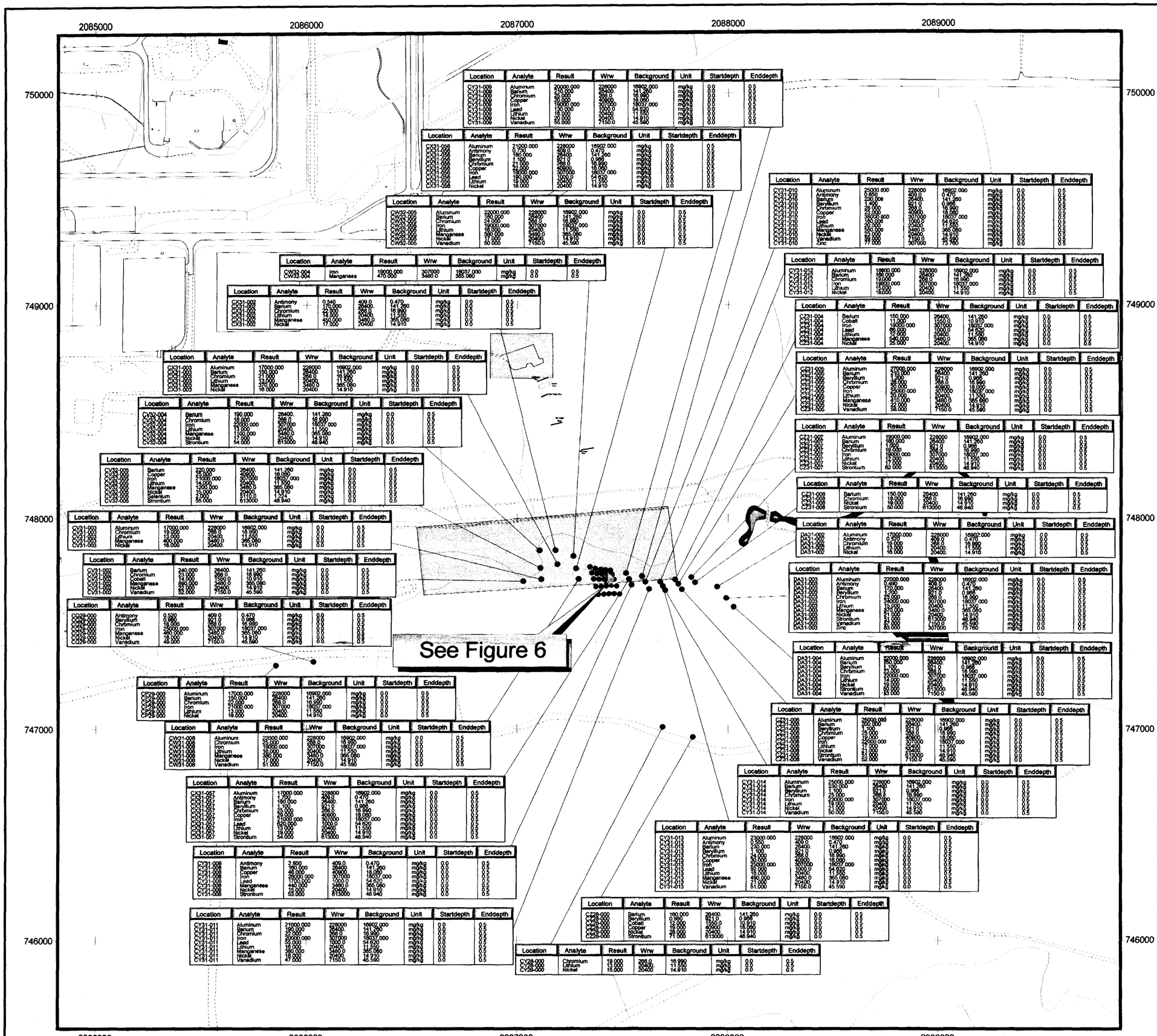
Date: 12.1.04

Prepared for: KAISER•HILL COMPANY

File: W:\Projects\FY2005\903 Lip Area Closeout \Firing_Range\firing_range.apr

BZ-A-000776 pg. 67

FIGURE 5
IHSS Group 900-11
PAC SE-1602
East Firing Range
Outer South Area
Characterization
Sample Locations and Results



KEY

- Sampling location with results greater than wildlife refuge worker action level
- Sampling location with results greater than background means plus 2 standard deviations or reporting limits

PAC SE-1602 East Firing Range

Paved road

Dirt road

Stream

Pond

DRAFT

N
W E
S

100 0 100 200 300 400 500 600 Feet

Scale 1:4000

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

Date: 12.1.04

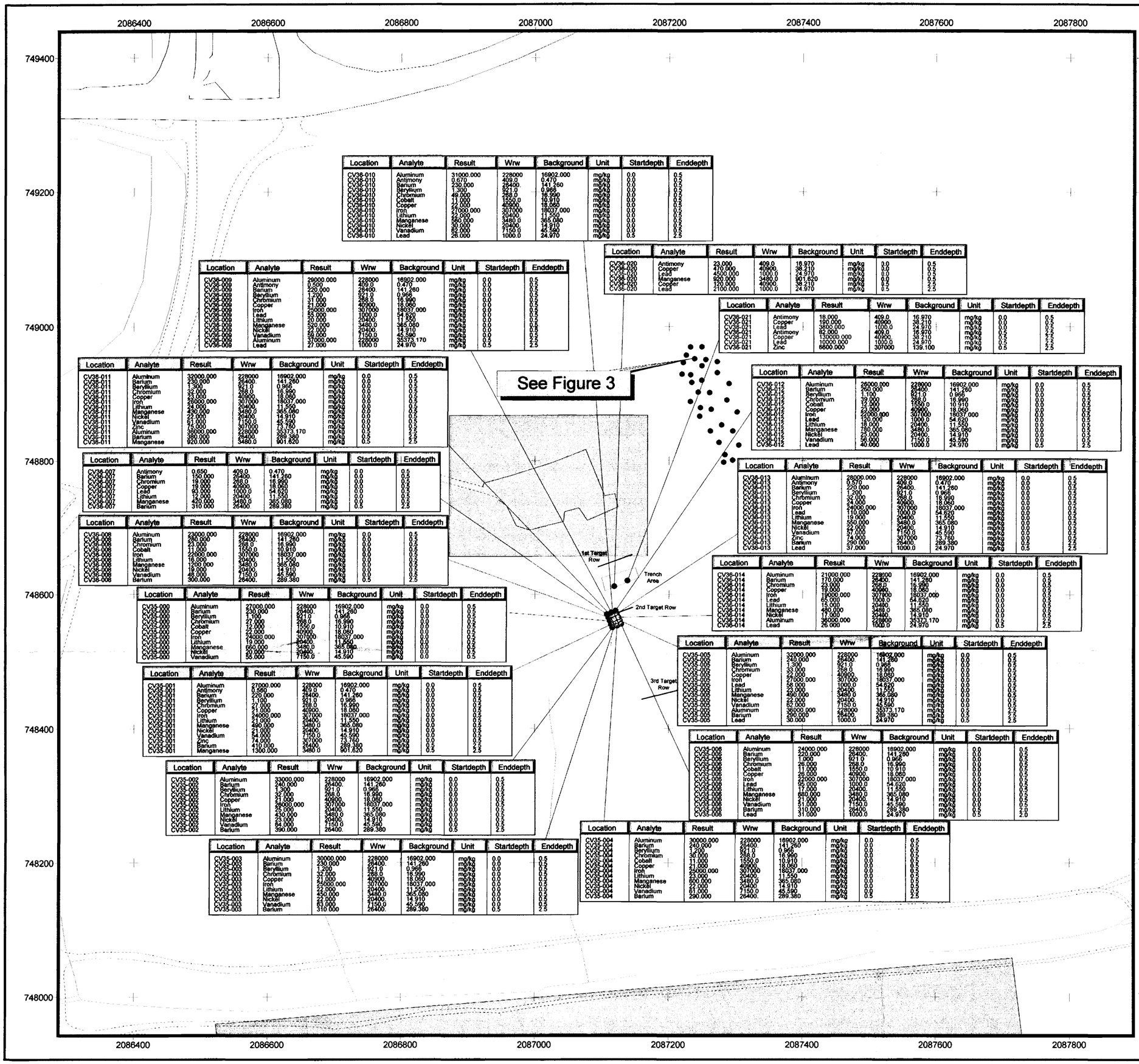
RADMS

Prepared for:

KAISER•HILL COMPANY

File: W:\Projects\FY2005\903 Lip Area Closeout \Firing_Range\firing_range.apr

FIGURE 4
IHSS Group 900-11
PAC SE-1602
East Firing Range
South of Trench Area
Characterization
Sample Locations and Results



Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-010	Aluminum	31000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-010	Antimony	0.670	409.0	0.470	mg/kg	0.0	0.5
CV36-010	Barium	236.000	26400.	141.260	mg/kg	0.0	0.5
CV36-010	Beryllium	1.300	921.0	0.966	mg/kg	0.0	0.5
CV36-010	Chromium	49.000	268.0	16.990	mg/kg	0.0	0.5
CV36-010	Cobalt	11.000	1550.0	10.910	mg/kg	0.0	0.5
CV36-010	Copper	22.000	40900.	18.060	mg/kg	0.0	0.5
CV36-010	Iron	27000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-010	Lithium	22.000	20400.	11.550	mg/kg	0.0	0.5
CV36-010	Manganese	560.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-010	Nickel	30.000	20400.	14.910	mg/kg	0.0	0.5
CV36-010	Vanadium	52.000	7150.0	45.590	mg/kg	0.0	0.5
CV36-010	Lead	26.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-020	Antimony	23.000	409.0	16.970	mg/kg	0.0	0.5
CV36-020	Copper	470.000	40900.	38.210	mg/kg	0.0	0.5
CV36-020	Lead	4500.000	1000.0	24.970	mg/kg	0.0	0.5
CV36-020	Manganese	920.000	3480.0	901.620	mg/kg	0.0	0.5
CV36-020	Nickel	120.000	40900.	38.210	mg/kg	0.5	2.5
CV36-020	Lead	2100.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-009	Aluminum	29000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-009	Antimony	0.500	409.0	0.470	mg/kg	0.0	0.5
CV36-009	Barium	220.000	26400.	141.260	mg/kg	0.0	0.5
CV36-009	Beryllium	1.200	921.0	0.966	mg/kg	0.0	0.5
CV36-009	Chromium	31.000	268.0	16.990	mg/kg	0.0	0.5
CV36-009	Copper	21.000	40900.	18.060	mg/kg	0.0	0.5
CV36-009	Iron	25000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-009	Lead	55.000	1000.0	54.620	mg/kg	0.0	0.5
CV36-009	Lithium	20.000	20400.	11.550	mg/kg	0.0	0.5
CV36-009	Manganese	520.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-009	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CV36-009	Vanadium	59.000	7150.0	45.590	mg/kg	0.0	0.5
CV36-009	Aluminum	37000.000	228000	35373.170	mg/kg	0.5	2.5
CV36-009	Lead	27.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-021	Antimony	18.000	409.0	16.970	mg/kg	0.0	0.5
CV36-021	Copper	190.000	40900.	38.210	mg/kg	0.0	0.5
CV36-021	Lead	3800.000	1000.0	24.970	mg/kg	0.0	0.5
CV36-021	Antimony	82.000	409.0	16.970	mg/kg	0.5	2.5
CV36-021	Copper	130000.000	40900.	38.210	mg/kg	0.5	2.5
CV36-021	Lead	10000.000	1000.0	24.970	mg/kg	0.5	2.5
CV36-021	Zinc	6800.000	307000	139.100	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-011	Aluminum	32000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-011	Barium	230.000	26400.	141.260	mg/kg	0.0	0.5
CV36-011	Beryllium	1.300	921.0	0.966	mg/kg	0.0	0.5
CV36-011	Chromium	32.000	268.0	16.990	mg/kg	0.0	0.5
CV36-011	Copper	33.000	40900.	18.060	mg/kg	0.0	0.5
CV36-011	Iron	29000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-011	Lithium	24.000	20400.	11.550	mg/kg	0.0	0.5
CV36-011	Manganese	430.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-011	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CV36-011	Vanadium	61.000	7150.0	45.590	mg/kg	0.0	0.5
CV36-011	Zinc	74.000	307000	73.760	mg/kg	0.0	0.2
CV36-011	Aluminum	36000.000	228000	35373.170	mg/kg	0.5	2.5
CV36-011	Barium	380.000	26400.	289.380	mg/kg	0.5	2.5
CV36-011	Manganese	920.000	3480.0	901.620	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-012	Aluminum	26000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-012	Barium	260.000	26400.	141.260	mg/kg	0.0	0.5
CV36-012	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CV36-012	Chromium	39.000	268.0	16.990	mg/kg	0.0	0.5
CV36-012	Cobalt	12.000	1550.0	10.910	mg/kg	0.0	0.5
CV36-012	Copper	23.000	40900.	18.060	mg/kg	0.0	0.5
CV36-012	Iron	22000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-012	Lead	120.000	1000.0	54.620	mg/kg	0.0	0.5
CV36-012	Lithium	18.000	20400.	11.550	mg/kg	0.0	0.5
CV36-012	Manganese	780.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-012	Nickel	25.000	20400.	14.910	mg/kg	0.0	0.5
CV36-012	Vanadium	56.000	7150.0	45.590	mg/kg	0.0	0.5
CV36-012	Lead	40.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-007	Antimony	0.650	409.0	0.470	mg/kg	0.0	0.5
CV36-007	Barium	150.000	26400.	141.260	mg/kg	0.0	0.5
CV36-007	Chromium	19.000	268.0	16.990	mg/kg	0.0	0.5
CV36-007	Copper	18.000	40900.	18.060	mg/kg	0.0	0.5
CV36-007	Lead	63.000	1000.0	54.620	mg/kg	0.0	0.5
CV36-007	Lithium	12.000	20400.	11.550	mg/kg	0.0	0.5
CV36-007	Manganese	424.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-007	Barium	310.000	26400.	289.380	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-013	Aluminum	28000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-013	Antimony	0.570	409.0	0.470	mg/kg	0.0	0.5
CV36-013	Barium	220.000	26400.	141.260	mg/kg	0.0	0.5
CV36-013	Beryllium	1.200	921.0	0.966	mg/kg	0.0	0.5
CV36-013	Chromium	32.000	268.0	16.990	mg/kg	0.0	0.5
CV36-013	Copper	24.000	40900.	18.060	mg/kg	0.0	0.5
CV36-013	Iron	24000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-013	Lead	110.000	1000.0	54.620	mg/kg	0.0	0.5
CV36-013	Lithium	19.000	20400.	11.550	mg/kg	0.0	0.5
CV36-013	Manganese	550.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-013	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CV36-013	Vanadium	57.000	7150.0	45.590	mg/kg	0.0	0.5
CV36-013	Zinc	74.000	307000	73.760	mg/kg	0.0	0.2
CV36-013	Barium	290.000	26400.	289.380	mg/kg	0.5	2.5
CV36-013	Lead	37.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-008	Aluminum	23000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-008	Barium	280.000	26400.	141.260	mg/kg	0.0	0.5
CV36-008	Chromium	23.000	268.0	16.990	mg/kg	0.0	0.5
CV36-008	Cobalt	11.000	1550.0	10.910	mg/kg	0.0	0.5
CV36-008	Iron	22000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-008	Lithium	16.000	20400.	11.550	mg/kg	0.0	0.5
CV36-008	Manganese	1200.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-008	Nickel	19.000	20400.	14.910	mg/kg	0.0	0.5
CV36-008	Vanadium	48.000	7150.0	45.590	mg/kg	0.0	0.5
CV36-008	Barium	300.000	26400.	289.380	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV36-014	Aluminum	21000.000	228000	16902.000	mg/kg	0.0	0.5
CV36-014	Barium	170.000	26400.	141.260	mg/kg	0.0	0.5
CV36-014	Chromium	23.000	268.0	16.990	mg/kg	0.0	0.5
CV36-014	Copper	19.000	40900.	18.060	mg/kg	0.0	0.5
CV36-014	Iron	19000.000	307000	18037.000	mg/kg	0.0	0.5
CV36-014	Lead	65.000	1000.0	54.620	mg/kg	0.0	0.5
CV36-014	Lithium	15.000	20400.	11.550	mg/kg	0.0	0.5
CV36-014	Manganese	490.000	3480.0	365.080	mg/kg	0.0	0.5
CV36-014	Nickel	17.000	20400.	14.910	mg/kg	0.0	0.5
CV36-014	Aluminum	36000.000	228000	35373.170	mg/kg	0.5	2.5
CV36-014	Lead	26.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-000	Aluminum	27000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-000	Barium	230.000	26400.	141.260	mg/kg	0.0	0.5
CV35-000	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CV35-000	Chromium	27.000	268.0	16.990	mg/kg	0.0	0.5
CV35-000	Cobalt	12.000	1550.0	10.910	mg/kg	0.0	0.5
CV35-000	Copper	22.000	40900.	18.060	mg/kg	0.0	0.5
CV35-000	Iron	24000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-000	Lithium	19.000	20400.	11.550	mg/kg	0.0	0.5
CV35-000	Manganese	660.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-000	Nickel	20.000	20400.	14.910	mg/kg	0.0	0.5
CV35-000	Vanadium	55.000	7150.0	45.590	mg/kg	0.0	0.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-005	Aluminum	32000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-005	Barium	240.000	26400.	141.260	mg/kg	0.0	0.5
CV35-005	Beryllium	1.300	921.0	0.966	mg/kg	0.0	0.5
CV35-005	Chromium	33.000	268.0	16.990	mg/kg	0.0	0.5
CV35-005	Copper	22.000	40900.	18.060	mg/kg	0.0	0.5
CV35-005	Iron	27000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-005	Lead	58.000	1000.0	54.620	mg/kg	0.0	0.5
CV35-005	Lithium	22.000	20400.	11.550	mg/kg	0.0	0.5
CV35-005	Manganese	490.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-005	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CV35-005	Vanadium	62.000	7150.0	45.590	mg/kg	0.0	0.5
CV35-005	Aluminum	36000.000	228000	35373.170	mg/kg	0.5	2.5
CV35-005	Barium	250.000	26400.	289.380	mg/kg	0.5	2.5
CV35-005	Lead	30.000	1000.0	24.970	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-001	Aluminum	27000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-001	Antimony	0.560	409.0	0.470	mg/kg	0.0	0.5
CV35-001	Barium	220.000	26400.	141.260	mg/kg	0.0	0.5
CV35-001	Beryllium	1.100	921.0	0.966	mg/kg	0.0	0.5
CV35-001	Chromium	27.000	268.0	16.990	mg/kg	0.0	0.5
CV35-001	Copper	21.000	40900.	18.060	mg/kg	0.0	0.5
CV35-001	Iron	24000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-001	Lithium	21.000	20400.	11.550	mg/kg	0.0	0.5
CV35-001	Manganese	490.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-001	Nickel	21.000	20400.	14.910	mg/kg	0.0	0.5
CV35-001	Vanadium	54.000	7150.0	45.590	mg/kg	0.0	0.5
CV35-001	Zinc	74.000	307000	73.760	mg/kg	0.0	0.2
CV35-001	Barium	410.000	26400.	289.380	mg/kg	0.5	2.5
CV35-001	Manganese	1300.000	3480.0	901.620	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-006	Aluminum	24000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-006	Barium	220.000	26400.	141.260	mg/kg	0.0	0.5
CV35-006	Beryllium	1.000	921.0	0.966	mg/kg	0.0	0.5
CV35-006	Chromium	26.000	268.0	16.990	mg/kg	0.0	0.5
CV35-006	Cobalt	11.000	1550.0	10.910	mg/kg	0.0	0.5
CV35-006	Copper	20.000	40900.	18.060	mg/kg	0.0	0.5
CV35-006	Iron	22000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-006	Lead	55.000	1000.0	54.620	mg/kg	0.0	0.5
CV35-006	Lithium	17.000	20400.	11.550	mg/kg	0.0	0.5
CV35-006	Manganese	680.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-006	Nickel	21.000	20400.	14.910	mg/kg	0.0	0.5
CV35-006	Vanadium	51.000	7150.0	45.590	mg/kg	0.0	0.5
CV35-006	Barium	310.000	26400.	289.380	mg/kg	0.5	2.0
CV35-006	Lead	31.000	1000.0	24.970	mg/kg	0.5	2.0

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-002	Aluminum	33000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-002	Barium	240.000	26400.	141.260	mg/kg	0.0	0.5
CV35-002	Beryllium	1.300	921.0	0.966	mg/kg	0.0	0.5
CV35-002	Chromium	32.000	268.0	16.990	mg/kg	0.0	0.5
CV35-002	Copper	21.000	40900.	18.060	mg/kg	0.0	0.5
CV35-002	Iron	26000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-002	Lithium	25.000	20400.	11.550	mg/kg	0.0	0.5
CV35-002	Manganese	430.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-002	Nickel	23.000	20400.	14.910	mg/kg	0.0	0.5
CV35-002	Vanadium	54.000	7150.0	45.590	mg/kg	0.0	0.5
CV35-002	Barium	390.000	26400.	289.380	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-004	Aluminum	30000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-004	Barium	240.000	26400.	141.260	mg/kg	0.0	0.5
CV35-004	Beryllium	1.200	921.0	0.966	mg/kg	0.0	0.5
CV35-004	Chromium	30.000	268.0	16.990	mg/kg	0.0	0.5
CV35-004	Cobalt	11.000	1550.0	10.910	mg/kg	0.0	0.5
CV35-004	Copper	21.000	40900.	18.060	mg/kg	0.0	0.5
CV35-004	Iron	25000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-004	Lithium	23.000	20400.	11.550	mg/kg	0.0	0.5
CV35-004	Manganese	600.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-004	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CV35-004	Vanadium	61.000	7150.0	45.590	mg/kg	0.0	0.5
CV35-004	Barium	290.000	26400.	289.380	mg/kg	0.5	2.5

Location	Analyte	Result	Wrw	Background	Unit	Startdepth	Enddepth
CV35-003	Aluminum	30000.000	228000	16902.000	mg/kg	0.0	0.5
CV35-003	Barium	230.000	26400.	141.260	mg/kg	0.0	0.5
CV35-003	Beryllium	1.200	921.0	0.966	mg/kg	0.0	0.5
CV35-003	Chromium	32.000	268.0	16.990	mg/kg	0.0	0.5
CV35-003	Copper	21.000	40900.	18.060	mg/kg	0.0	0.5
CV35-003	Iron	25000.000	307000	18037.000	mg/kg	0.0	0.5
CV35-003	Lithium	22.000	20400.	11.550	mg/kg	0.0	0.5
CV35-003	Manganese	550.000	3480.0	365.080	mg/kg	0.0	0.5
CV35-003	Nickel	22.000	20400.	14.910	mg/kg	0.0	0.5
CV35-003	Vanadium	63.000	7150.0	45.590	mg/kg	0.0	0.5
CV35-003	Barium	310.000	26400.	289.380	mg/kg	0.5	2.5

KEY

- Sampling location with results greater than wildlife refuge worker action level
- Sampling location with results greater than background means plus 2 standard deviations or reporting limits

PAC SE-1602
East Firing Range

Paved road

Dirt road

Stream

Pond

N
W E
S

50 0 50 100 150 200 Feet

Scale 1:1275

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

DRAFT

Prepared by:

Date: 12.1.04

RADMS

Prepared for:

KAISER•HILL COMPANY

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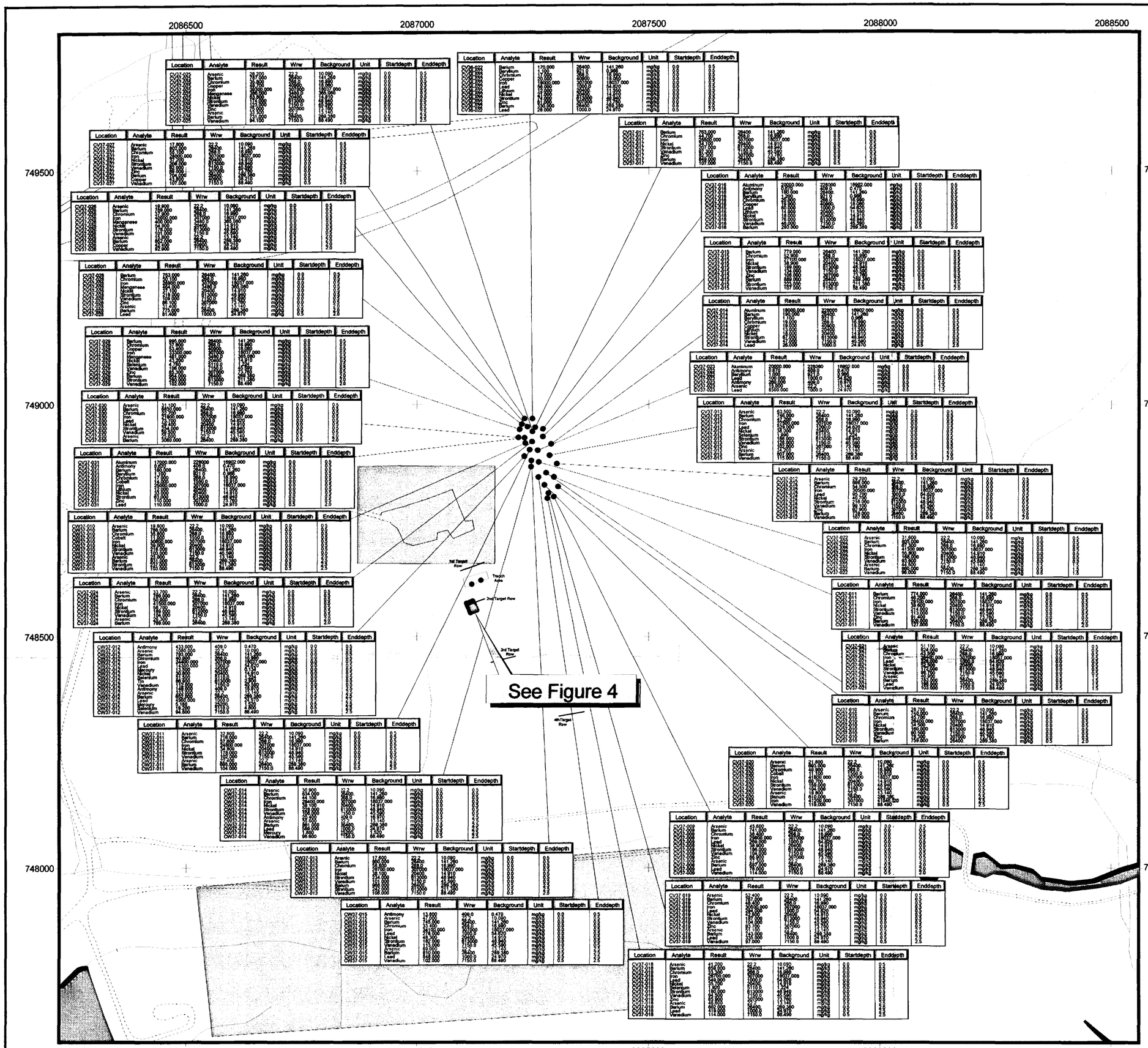

FIGURE 3
IHSS Group 900-11
PAC SE-1602
East Firing Range
Berm Area
Characterization
Sample Locations
and Results

KEY

- Sampling location with results greater than wildlife refuge worker action level
- Sampling location with results greater than background means plus 2 standard deviations or reporting limits

PAC SE-1602
East Firing Range

Paved road

Dirt road

Stream

Pond

DRAFT

N
W E
S

60 0 60 120 180 240 300 Feet

Scale 1:1850

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

Date: 12.1.04

RADMS

Prepared for:

KAISER•HILL COMPANY

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BZ-A-000776 pg. 64